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DETERMINING THE MINT-ATTRIBUTION OF EAST ANGLIAN SCEATTAS THROUGH REGRESSION ANALYSIS

D.M. METCALF

THE East Anglian sceattas of Series R have been classified into a dozen varieties, R1 to R12, with declining silver contents, and the question arises whether they should all (oddities excepted) be attributed to a single mint, and if so where, or whether there might have been more than one mint in East Anglia, striking coins of essentially the same type concurrently, as a coordinated exercise of what was in any case doubtless royal power. The only way to approach this question (in principle, there is no other way) is to study the circulation of the various stylistic groups within East Anglia, with a view to detecting any signs of localization, such as might point us towards the locality where a variety was concentrated, and where presumably it was minted. Miss Archibald has led the way with this technique by mapping the different issues of King Beonna, drawing attention to Thetford as well as to Ipswich or its region as probable mint-places.¹ We should be well advised to bear this slightly later evidence in mind, on the presumption of continuity. At the earlier end of the sceatta series, we have some evidence of the localization of royal power in the Sutton Hoo ship burial, on a bluff overlooking the town of Woodbridge across the Deben estuary; and not far away, archaeologists have explored the early history of the trading *wic* of Ipswich. Thus, from a date before the introduction of sceattas, there seems to be a power base in the south-eastern quadrant of East Anglia. From the period of the sceattas, however, there are surprisingly few useful topographical indicators within East Anglia to help us interpret the political geography of the coinage, other than the coins themselves. The number of places within East Anglia mentioned by Bede is very limited, and the whereabouts of some of those, even, are not quite certain.²

The evidence of thrymsa and sceatta finds from East Anglia is denser than from any other major region of England. Finds are recorded from at least 131 localities scattered thickly all over Norfolk and Suffolk (and the total is growing year by year). The list includes some 214 primary sceattas and 323 secondary sceattas. This distribution is shown in Fig. 1, where each dot represents a locality, e.g. a parish. The numbers beside the dots show that more than one coin has been found in the locality, although not necessarily on the same site. All these finds are single finds: hoards have in principle been excluded. The map includes a few additional recent finds in Norfolk and Suffolk, plus a dozen finds from that part of Essex which falls within the map area. Similarly, finds from the western borders of East Anglia, in the Fenlands, have been mapped, for reasons that will become clear.

The large number of recorded sites is in itself an argument that the use of sceattas was widespread. Historians and archaeologists have often been reluctant to recognize the possibility of a monetized economy in the eighth century. Williamson, for example, in his thorough and judicious book, *The Origins of Norfolk*,³ says that 'The earliest Middle Saxon coins seem to have been used for high-level exchange between elites, for the payment of tribute or the purchase of foreign commodities, but the sceattas appear to have been more widely employed. Large quantities recovered from outside the walls of the Roman forts of Burgh Castle and Caister-on-Sea perhaps indicate the sites of fairs ... Sceattas have also been found on a large number of rural sites, including Tibenham, Cockley Cley, Watton, Harling, and Costessy ... Nevertheless we should not exaggerate the extent to which market exchange impinged upon Middle Saxon society in Norfolk ...

Acknowledgements. I am grateful to John Newman, who read a draft and offered perceptive and expert comments.

¹ M.M. Archibald, 'The coinage of Beonna in the light of the Middle Harling hoard', *BNJ* 55 (1985), 10–54.

² J. Campbell, 'Bede's words for places', in P.H. Sawyer (ed.), *Names, Words and Graves: Early Medieval Settlement*, Leeds, 1979, pp. 34–54.

³ T. Williamson, *The Origins of Norfolk* (Manchester, 1993), at p. 81.

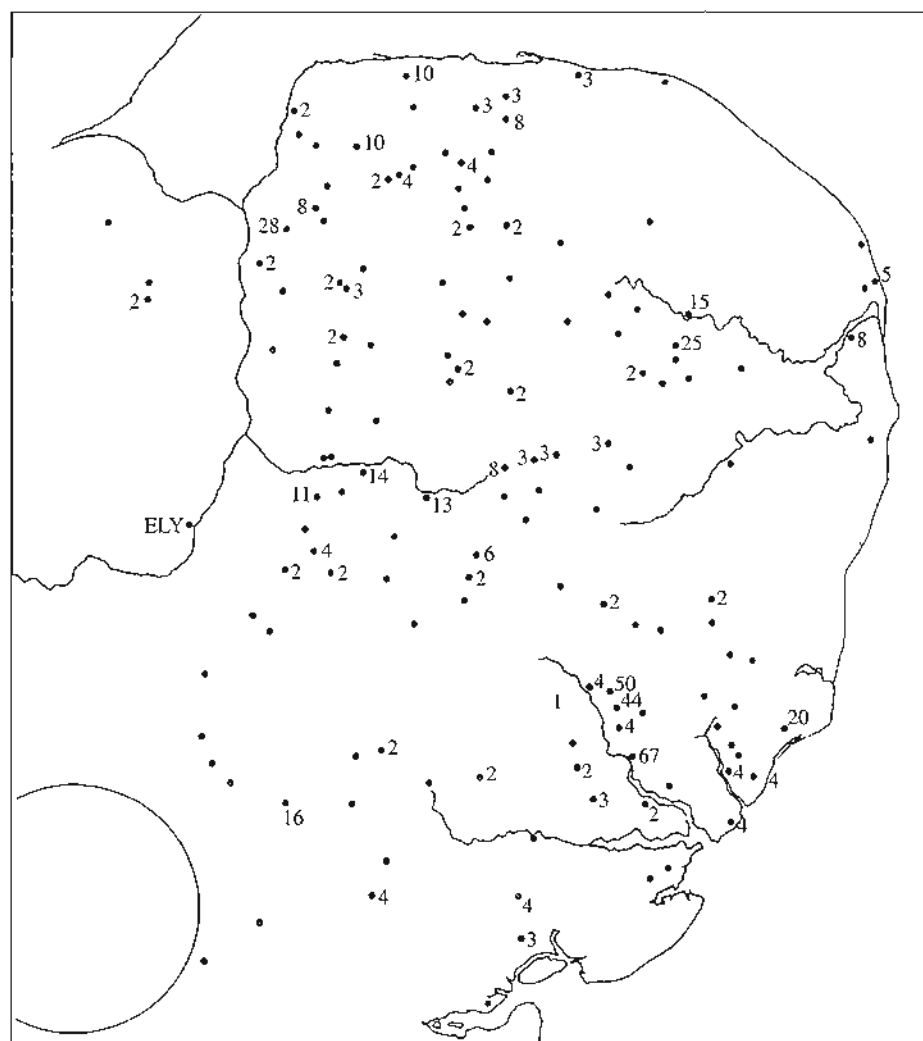


Fig. 1. Localities in Norfolk and Suffolk and adjacent areas where sceattas have been found. The numbers indicate the total of single finds from a locality (e.g. a parish or village), not necessarily from the same site within that locality. Hoards are excluded. The most prolific sites to date are Ipswich (67+), Coddenham (50), Barham (44), Bawsey (28), and Caistor St Edmund (25). Thetford, in spite of considerable excavation has yielded only 13, mostly from 'within 5 miles of Thetford' or '?from the by-pass'.

many goods appear to have moved through the medium of social relationships rather than by market exchanges ...' Virtually every clause of the passage just quoted makes a judgement which might or might not be true, but for which it is difficult to see how there could be any surviving evidence. In terms of eighth-century evidence, how would goods that had moved through the medium of social relationships look any different, in the archaeological record, from goods which had entered a monetary market? In response, one may say that the argument for monetization rests generally on a 'double whammy' or combination of an assessment of the quantities in which sceattas were struck (through die-estimation), plus an assessment of how they circulated (through an analysis of distribution patterns). Ten years ago, when Williamson was writing, there was perhaps more justification for what he said. Since then, the Coin Register has added annually to the evidence. By definition, not all these 131 sites in Norfolk and Suffolk are special sites: people were accidentally losing the odd coin in places all over East Anglia.

The raw numbers should not, of course, be used to judge the relative importance in monetary terms of different places. The totals shown in Fig. 1 are to a large extent influenced by the intensity of searching. Certain sites have been very productive, prompting the hypothesis of centres for the exchange of goods which were not necessarily at or near settlements. Some of these may have been periodic fairs, held in what was otherwise probably just open pasture land.⁴

Explanation of the method. The diversity in the numbers of finds from each locality makes it difficult to visualize, from Fig. 1, how relatively plentiful any particular variety is in different parts of East Anglia, from a simple map showing where that variety has been found. In order to overcome that problem, a method of presentation of the data has been developed, which is a kind of rolling or over-all regression analysis. One places a transparent overlay on the map, with a circle representing, for example 1,000 square kilometres. Part of such a circle is shown on Fig. 1, to give an idea of its size. If $\pi r^2 = 1,000$, $r = 17.8$ km, or about 11 miles. Selecting a suitable position on the map, one counts up the number of finds (not the number of dots!) which fall within the circle, and similarly the number of finds of the variety being studied, to obtain a ratio or percentage. This is a measure of how plentiful the variety was in that general locality. One repeats this procedure numerous times, moving the circle about to give a thorough coverage of the map. As a refinement, it is better to do this exercise separately for primary and secondary sceattas, because the monetary picture may have changed between the two phases – or at least, one does not know that it did not. Figs 2–4 below use a data-base of secondary sceattas only. Because East Anglia is so thickly covered with finds, one ends up with a map covered with percentages at specific points (the centre of each position of the circle), from which one can, reasonably objectively, draw lines analogous to the isobars on a weather forecast map. (When a version of this paper was presented at a BANS Weekend at Hertford College, Oxford, there was some light-hearted discussion whether the ‘isobars’ should be called isonums or sceattabars. As regards the term isonums, it is important to be clear that the lines do not join points where an equal number of *coins* have been found, but rather where the *ratio* in question is equal.) The data-points have been left on the maps, so that the reader may judge for himself or herself whether the ‘isobars’ are a fair interpretation of them.

The resulting maps, if we are prepared to read them closely, tell us interesting things about how different sceatta varieties circulated differently in East Anglia, and create an idea of regionalism within the kingdom, which certainly could not be obtained from any written sources of the eighth century, nor, one suspects, from archaeological exploration. What exactly each map portends is a matter for interpretation, because the percentages reflect the ‘competition’ between various sceatta types circulating in a locality, which is a complex balance, rather than just providing information about one type. In general, one might expect a type to be at its most plentiful (percentage-wise) at and near the place where it was struck, declining as one goes further afield. This is the classical version of regression analysis. The method may be useful, therefore, for discovering the places where the East Anglian mint or mints were located. In principle, our ‘isobars’ will only point to the general locality; but within that locality, it may seem obvious from general considerations where the mint-place lay, e.g. in the Gipping valley one might look to the *wic* of Ipswich.

The percentages, obviously, will be subject to margins of statistical imprecision. The size chosen for the data-gathering circle, which does not affect the general result, is a practical compromise between having enough finds within each circle to be statistically acceptable, and topographical precision. Actually, as far as one can see, one could mix data from circles of different size on the same map without affecting the validity of the data, but that refinement has not been attempted.

In practice, the way forward is through discovering contrasts between the map for one variety and that for another. These will give clues to the character of monetary affairs. In interpreting the maps, it seems clear that experience counts. The present study of East Anglia in the secondary phase of the sceattas is a pilot study for a major project, on which the writer is working, to synthesize

⁴ For a much fuller discussion, referring to East Anglia, see J. Newman, ‘Wics, trade, and the hinterlands – the Ipswich region’, in M. Anderton (ed.), *Anglo-Saxon Trading Centre. Beyond the Emporia* (Glasgow, 1999), pp. 32–47.

in the currency of the Ipswich area, where they fetched up in some quantities. Given that at least three-quarters (we may guess) of the output of the Q mint stayed within East Anglia, the volume of monetary transfers from the NW to the SE quadrant can be envisaged, very roughly, in terms of the output of an estimated number of dies. There were corresponding, and perhaps even larger, transfers of Series R in the opposite direction.

The mint-place of Series QI–III, within the west Norfolk orbit, is a mystery. It is likely to have been a *wic* with access to the sea, via the Wash, but where it was is puzzling. Various places, including Wisbech, Hey Green, Castle Rising, Burnham, and Ely have been canvassed. Ely (suggested by John Newman), is mentioned by Bede as lying ‘within the province of the East Angles’; it is marked on Fig. 1. Because the distribution-patterns shown in Figs. 2 and 3 (below) suggest that the core of the west Norfolk circulation area lay at its northern end, and stopped well short of Thetford, it might be argued that one should be looking for a more northerly location for the mint, e.g. in the vicinity of Castle Rising, or even (as Andrew Rogerson has suggested) at a *wic* at Burnham.

The implication of the reversed gradient half-way between west Norfolk and east Suffolk (16; 5; 7) would seem to be that sums of money were carried directly from *wic* to *wic* – and that from Ipswich coins of Series Q diffused back in a north-westerly direction.

The cut-off westwards from Norfolk is less precisely defined, because there are (unsurprisingly) few finds recorded from the northern Fenlands, until one gets as far west as Spalding. The percentages of 67 in fact merely mean that two secondary sceattas out of three are of Series Q. One of these is the mysterious ‘L. Sutton’ find, which may be from Long Sutton, and the other is from West Walton, just north of Wisbech. In principle, of course, the ratio Q/all secondary sceattas should be the same however small the total numbers, subject only to the wider margins of statistical uncertainty. Even one new find would alter the percentages significantly. In practice, an added problem is that the data-gathering circle, when it is positioned along the line of the Ouse or thereabouts, will tend to have many more coins in its eastern than in its western half – a problem that would be overcome if one could afford to operate with a smaller circle.

The political boundary of East Anglia in the period c.715–755 is not known from any specific evidence: it could still have been shifting westwards, as the kingdom absorbed some of the smaller tribal groupings of the Fenland edges.⁵ Could Q conceivably be the coinage of an independent or semi-independent political entity? The wealth of this region is indicated by the number of substantial Ipswich ware scatters. Could the sharp edges reflect some sort of political boundary, within which Q circulated with political backing, and if so what was the relationship of the region to the East Anglian kingdom as a whole? It seems a very tall order, but let us reserve judgement until we have acquired a bit more experience, by looking at the ‘isobars’ for Series R.

One could just add that QI–III occurs unexpectedly at York (and Carlisle), but not in Yorkshire generally, thus hinting at some sort of high-level political contacts between East Anglia and (?the bishops of) York.

Commentary on Fig. 3 (Series R. Types R3–12, except R5 and R9). Series R is completely different from Q in its iconography and style, except that eventually the two designs are muled in a runic type reading *er* which belongs with Q. The ‘isobars’ generated by R delineate a very different pattern of circulation, with roughly similar proportions in the NW, NE, and SE quadrants of East Anglia, and with no cliff-like discontinuities within the kingdom. The west Norfolk ‘platform’ extends less far south. The proportions are generally around 30 per cent in the Gipping valley and also the Norwich region, and even higher in west Norfolk (the latter in spite of the localization there of QI–III – perhaps because fewer extraneous issues entered the currency there than at Ipswich, etc.). Series R served the whole East Anglian kingdom. The cut-off between west Norfolk and the Fenlands is again statistically imprecise because of the shortage of evidence.

The total numbers of finds from the Gipping valley are large, e.g. over 100 within the data-gathering circle (see Fig. 1), making the percentages from there particularly secure, whereas some

⁵ For a very useful map, see C.R. Hart, ‘The Kingdom of Mercia’, in A. Dornier (ed.), *Mercian Studies* (Leicester, 1977) pp. 43–61, at pp. 44–5 and 50–1.

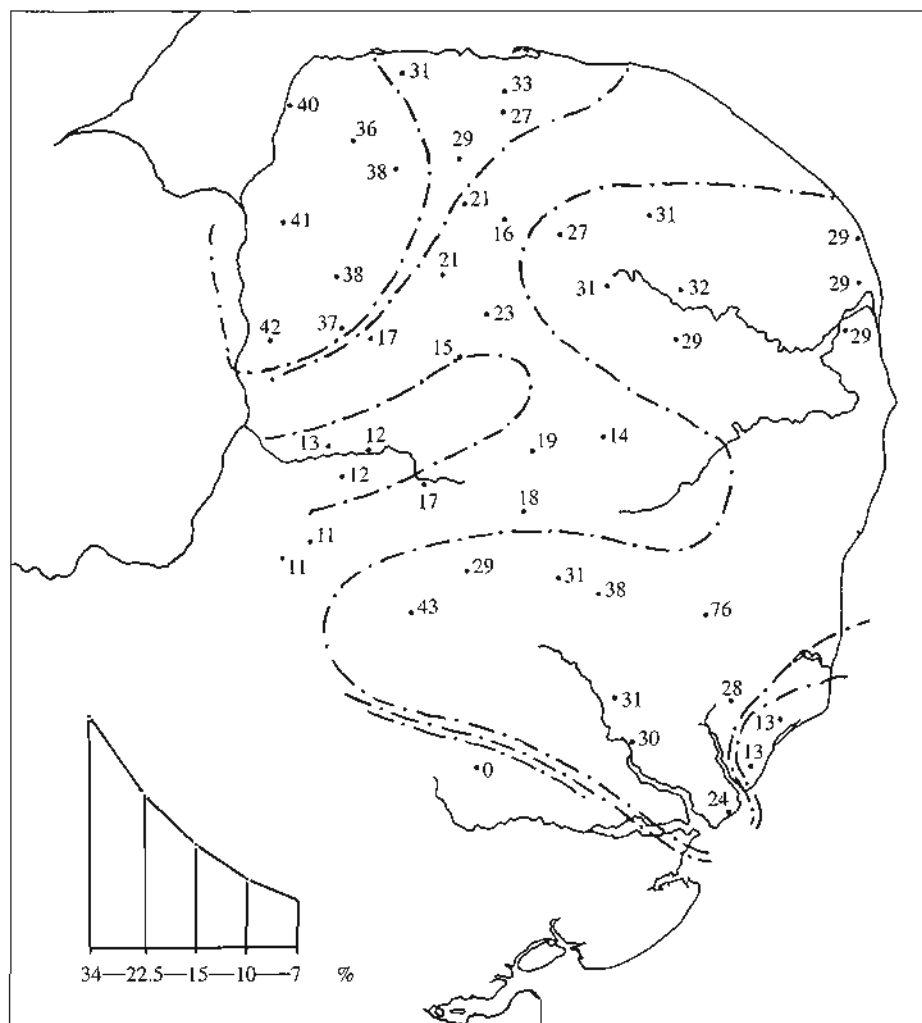


Fig. 3. Percentages for the secondary runic sceattas, Types R3–12 excluding R5 and R9, as a proportion of secondary sceattas, with suggested 'isobars' based on the percentages. Each data point is at the centre of a 1,000 km² circle. The 'isobars' have been drawn at proportional intervals of half as much again, as shown in the inset diagram.

of those from the hinterland are probably erratic (e.g. $13/17 = 76$ per cent). The lower percentages in the coastal belt directly north of the estuaries may be caused by coastwise trading, or it may be more chronological, reflecting the unusually large proportion of coins of Beonna, for example, from the Burrow Hill excavations.

Find-spots from Essex, within the map area, have been plotted, in order to help to define the southern edge of the circulation area of Types R3–12. The cut-off is quite sharp – partly, perhaps because forested areas imposed a natural barrier between Suffolk and Essex.⁶ The lack of Ipswich ware in any quantity south of the River Stour helps to confirm that this is not merely a monetary discontinuity. Note the figure of 16 against one dot on the map (Fig. 1). This represents finds reported guardedly as being from 'north Essex' (11) and 'north-west Essex' (5) without further localization. The 'north Essex' group could, one imagines, have come from further east than the position shown on the map, but in any case all 16 can fairly safely be accepted as valid evidence for this question concerning the discontinuity at the Suffolk/Essex border.

⁶ C.R. Hart, *The Danelaw* (1992), at pp. 25–6.

The percentages in west Norfolk are even higher than in east Suffolk, which is curious, if the coins in question originated in east Suffolk. Although the list of finds is lengthy, so many of them are inadequately published that one cannot begin to tell whether, for example, Types 3a and 3b show any differences of distribution within East Anglia. Likewise, a corpus of Type 8 will be needed before one can ask similar questions about it.

The 'col' or saddle in the percentages between the SE and NW quadrants is very adequately attested. It hints at other types entering the currency in the intermediate zone, from Cambridgeshire, etc.

The proportion in the Burgh Castle – Norwich region is very similar to that in the Gipping valley. Again there seems to be a 'col' of lower percentages between east and west Norfolk, and even more so between east Norfolk and east Suffolk, implying perhaps that the secondary runics entered the region predominantly by sea.

Because Types R3–12 are spread rather evenly over such a large part of East Anglia, involving three of the four quadrants, in principle we cannot deduce from the distribution map the quadrant(s) in which they were minted.

Commentary on Fig. 4 (R5 and R9). These two related types, characterized by the runic legend *spi* on some specimens, provide the big surprise so far: there is persuasive evidence of localization in east Norfolk, with the highest values at and near Caister-on-Sea and Burgh Castle, the shore fort guarding Breydon Water. It seems virtually certain that R5/9 was minted over a significant length of time⁷ in the NE quadrant; and within that quadrant, the figures are below-trend in the vicinity of Norwich. Apart from the vicinity of Breydon Water, the NE quadrant is archaeologically a bit of a 'backwater'. Can the mint-place have been Caister or Burgh Castle? The map does not help us to choose between them, but one may note that Bede mentions *Cnobheresburg* (= Burgh Castle?) as a monastic site.⁸

The general contrast with Fig. 3 is unmistakeable, and the quantified differences (10–15 per cent in the Norwich region, compared with only around 5 per cent in the Ipswich region, and even less in west Norfolk) are impressive. What was the political context in which coins of the same type, differing only a little in style, so far as the users were concerned, were issued concurrently at more than one mint within the kingdom?

Type R7 (runic rhy). The localization of a regionally distinct mint-place for R5/9 creates a presumption that R7 is similarly from another (very small) mint. The only provenances so far on record are Caister-by-Yarmouth and Caistor-by-Norwich, both in the NE quadrant. Perhaps R7 is simply by another die-engraver working for the R5/9 mint? But the evidence is still slender.

Series QIV. A map for QIV (in distinctive modelled style) shows an altogether different distribution pattern from QI–III. It is absent from west Norfolk (where QI–III is so strong), and shows 7–8 per cent beside the Deben estuary (i.e. the access to Woodbridge), but 6 per cent at Ipswich and in the Gipping valley. North-westwards from there, there is a long 'tail' reaching as far as Thetford and the Little Ouse (2–3 per cent). Once again, the Gipping valley/Lark valley corridor shows up in the monetary evidence as an important routeway. Otherwise, there is just the odd stray find from the Norwich region, on which one should not build large conclusions.

Where was QIV minted? – Somewhere in the Ipswich region, plainly. Is it in any administrative sense connected with QI–III, or are its bird and animal motifs merely reminiscent in a general way of QI–III? How can its minting have coexisted in the SE quadrant with the minting of Series R? Could Series R have been minted, for example, at Ipswich, while Type QIV was (for part of the same period) minted at Woodbridge? Or *vice versa*? Of course, both series, and also QI–III, circulated together without let or hindrance, as our distribution maps imply, and as the Cambridge

⁷ As shown by debasement: analyses 403 and 421 in D.M. Metcalf, *Thymas and Sceattas in the Ashmolean Museum* (Oxford), vol. 3, pp. 674–7. More data, obviously, would be desirable.

⁸ See M.J. Darling with D. Gurney, *Caister-on-Sea. Excavations by Charles Green, 1951–55* (East Anglian Archaeology, vol. 60) (1993). Sceattas at pp. 68–71.

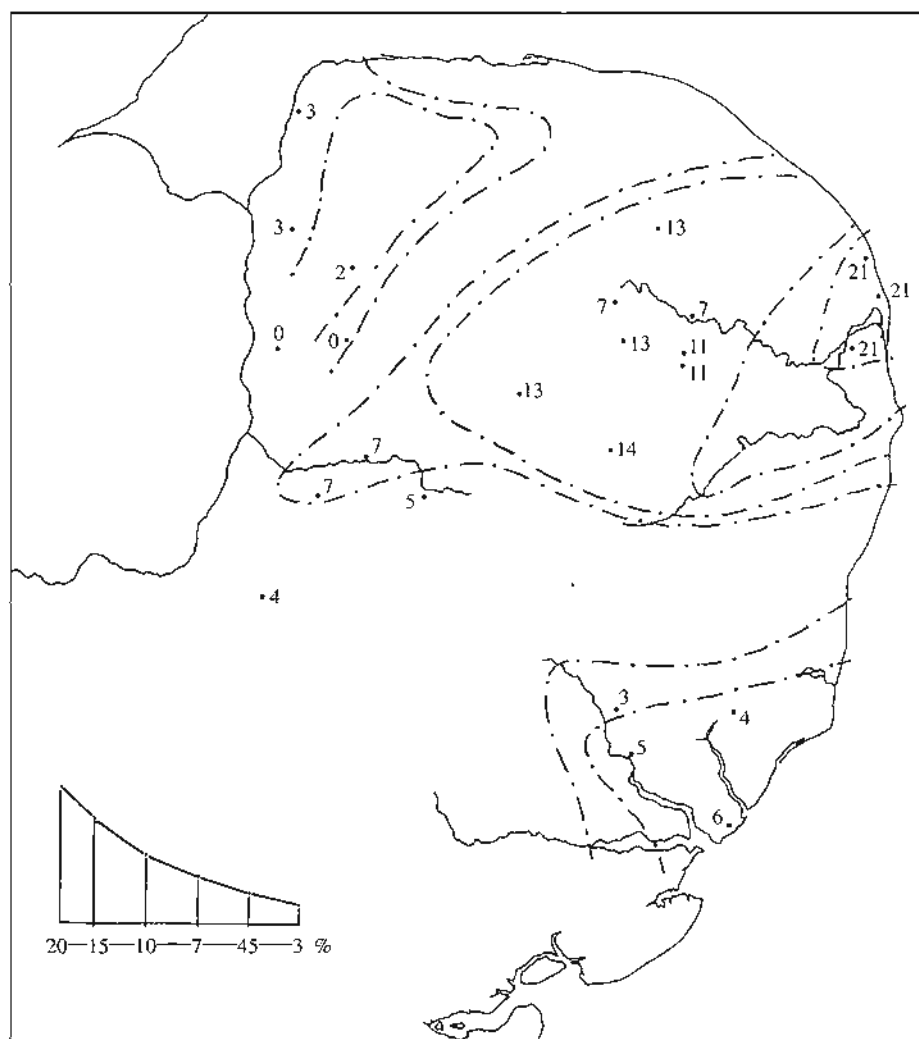


Fig. 4. Percentages for the secondary runic sceattas of the 'spi' group (R5 and R9), as a proportion of secondary sceattas, with suggested 'isobars' based on the percentages. Each data point is at the centre of a 1,000 km² circle. The 'isobars' have been drawn at proportional intervals of half as much again, except for the 20 per cent line, as shown on the inset diagram.

hoard illustrates. It is just a question of where they were minted. But (speculating wildly) could one series be commercial, the other royal? Why was one distributed throughout East Anglia, and the other not? These are pregnant questions, which we are certainly not yet in a position to answer, but which might have far-reaching implications, assuming that the facts are secure.

Series QIV would seem to have been quite a compact issue, with a restricted date-range, whereas R was an exceptionally long-lasting series. The relative dating of QIV can only be judged from its alloy, which seems to be quite good. Attempts have been made in the past to envisage a late phase of the sceattas, associated with a somewhat restored alloy-standard, but there is no cogent evidence for such an improvement before the time of Beonna. The small percentage difference between Ipswich and the Deben estuary could be fortuitous, or it could perhaps be chronological again.

Superimposing the maps. If one can imagine superimposing Figs. 2, 3 and 4, plus similar maps for R7 and Series QIV, they would together create a picture of coin types circulating in the same region (East Anglia), and yet behaving differently, in ways that presumably arise out of the differ-

ent contexts in which the coin-types were issued – a major *wic* on the North Sea coast, a lesser *wic* further north along the coast, and a third presumed *wic* with access to the Wash. Series R3–12 had a widespread, uniform use, in contrast with the more localized R5/9, even though the two groups would have been indistinguishable to most users. The wide scatter of finds through East Anglia has already been adduced, in combination with the quantities minted, as evidence of a monetized economy. The within-sample variation in the ways that the different types circulated should, one feels, sharpen that argument, although it is probably too soon to specify exactly how.

For the four quadrants of East Anglia, the percentages of the sceattas of Series Q and R stack up (approximately) as follows:

	NW	NE	SW	SE
QI–III	18	0	0	7
R3–12	39	30	10	30
R5/9	3	20	0	5
QIV	0	0	0	8
Total	60	50	10	50

Other types with, apparently, an East Anglian focus

Types R1–2. The earliest runic *epa* coins, present already in the Aston Rowant hoard, account for around 4 per cent (of primary sceattas) in the Gipping valley, and very little elsewhere in East Anglia, except for a coastal swathe, running at about 15 per cent, in north-central Norfolk, suggestive of coastwise penetration. The type reached York and its vicinity.

There seems to be a contrast with Series C, which shows relatively heavy penetration into west Suffolk; about 5 per cent in east Suffolk, 10 per cent in east Norfolk; and a similar level in west Norfolk, where, however, imitations (of very variable quality) are in the majority. Recognizing good-quality ‘imitations’ of Series C is usually fairly cut and dried, but their organizational significance, i.e. whether they could after all be from the main mint-place, is to some extent debateable, unless the stylistic evidence is supported by a distributional contrast.

The mint-attribution of Types A, C, and R1–2 as between Kent, (Essex), and East Anglia is a thorny topic, for which regression analysis would seem to be an excellent method to apply. It calls for fuller treatment on another occasion, and the above remarks, while going far to localize R1–2, do not amount to a rounded judgement.

Type BZ. With eight specimens from East Anglia, the evidence is flimsy. Taking it at its face value, we can perhaps say that the proportions are running at about 3–4 per cent in the Ipswich region, 4–6 per cent in west Norfolk, 8 per cent in the Norwich region, and even higher in the Thetford region (but on the evidence of a single coin). Apparently a Norfolk type, but it is too soon for any settled judgement. From Yorkshire and Lincolnshire there is just one find, from Whitby.

Types 30, 51, etc. There is an intriguing cluster in west-central Norfolk (Burnham Market, 2; East Rudham; Fakenham; Shipdham). Cf. North Ferriby, Sancton, Alford, and Alkborough, around the Humber estuary.

Type 70. Even with just half-a-dozen finds, a west Norfolk focus is apparent (Heacham, Brandon, and Congham). Cf. Humberside finds from Elloughton and Welton (ERY) and from Market Rasen (Lincs).

Summing-up. The location of minting in the secondary phase is clearer to us than in the primary phase, mainly because the circulation of sceattas was becoming more localized, and we can see the core areas of circulation from an adequate number of finds. Series R3–12 seems to coincide in its distribution, so far as one can judge, with the boundaries of the East Anglian kingdom, and it is difficult to envisage it as anything other than a royal coinage. Because it was spread quite evenly

throughout Norfolk and Suffolk, its mint-place (or mint-places) are not obvious from an analysis of the single finds. One's instinct is to look towards Ipswich, where excavations have yielded 18 specimens of R3-12, and two of R5/9, out of some 60 secondary sceattas; but this is not strictly a conclusion derived from the find-evidence.

Series QI-III, by contrast, is very clearly localized in west Norfolk, where its circulation seems to have had quite sharp edges. It will have been minted there, or (less probably) in the Fenlands, but in either case at a site with access to the sea. The political circumstances in which QI-III and R3-12 coexisted, over a long period, in west Norfolk are completely obscure. There were evidently monetary transfers on an ongoing basis between the Ipswich region and west Norfolk, and *vice versa*. These seem to have been the two dominant areas of monetary circulation in East Anglia. Money may have been carried from one *wic* to the other, and then diffused locally. Between the two areas, there was a corridor of monetary influence stretching from Ipswich to Thetford, but this middle ground seems to have been open to monetary influences from outside East Anglia, from the south-west. There is no distributional evidence to suggest that Thetford was a mint-place at this stage.

The Norwich/Caister region is the focus for the runic *spi* group, namely Types R5/9, which were evidently minted locally, and apparently at the coast. The concurrent issue of R3-12, R5/9, and R7 within the East Anglian kingdom may reflect royal control enforcing the same coin type at two or even three North Sea coastal mints. This makes more acute the dilemma of the iconographical independence of Q. The final, very debased QIII coins mule the traditional R design: could this reflect a political accommodation at a date around the middle of the century? Series QIV, finally, has a completely different localization from QI-III. It is concentrated in east Suffolk, possibly (but the percentage differences are tiny) at another mint-place from R, e.g. Ipswich and Woodbridge. This is extremely intriguing but problematic.

The localization of minting in East Anglia in the primary phase is less well evidenced. The region seems to have been supplied with currency much of which came from Kent, London, and the Rhine mouths area. Local issues of sceattas started from a surprisingly low base-line, in spite of an earlier monetary history of inflows of gold tremisses from the Continent. The spread of Series C into East Anglia is the context for interpreting the runic *epa* coins of Types R1-2. They belong to the Ipswich area, and it is slightly unexpected that they have not turned up more freely in the Ipswich excavations. They are rarely found in Kent. They originated shortly before the t.p.q. of the Aston Rowant hoard, thus c.705-10, which is well after commercial activity began at Ipswich.

If Series QI-III had a precursor at its west Norfolk mint-place, the most likely candidate seems to be Type BZ, but there is no iconographical continuity. There are several other types which seem, on rather flimsy evidence, to be localized in Norfolk or around the Fenland margins, into the politically fragmented area of Middle Anglia. Their relatively sparse occurrence further north can be taken into account. The rag-tag of what may be loosely described as R/51 'mules' are not very coherent stylistically, and should be treated as a group for analytical purposes only with due reserve. The Garton grave-find, however, establishes an unexpectedly early date for at least some of them. In general, it is by no means clear that there was continuity of minting between the primary and secondary phases in East Anglia, and the primary phase should be investigated, not exactly in isolation, but in its own right.

Possible changes in the political frontiers of East Anglia are entirely speculative. Bede offers so little information about the political geography of the kingdom that one is, to all intents and purposes, reduced to the unconfirmed evidence of the coins themselves. They offer intriguing hints of a degree of political independence in a coastal region of west Norfolk. The emergence of a coherent kingdom of the East Angles, however, was much earlier, in 571 or thereabouts. The creation of Norfolk and Suffolk may have been in the 680s (again, preceding the sceattas), when the East Anglian diocese was divided in two. The old see of Dommoc (Dunwich?) continued in use, and a new see was established – according to William of Malmesbury – at Elmham (North Elmham?). It has to be said that this arrangement does not harmonize in any clear way with the Q/R division which is the most conspicuous line of cleavage in eighth-century monetary affairs.

Further research. 'And at my back I ever hear' – not Time's wingèd chariot, but the cryptic utterance, 'Hun, Beonna, and Alberht divided the kingdom'. If political stresses and strains, or personal strains within the ruling class, led to a temporary partition of the kingdom in the 750s (which some have doubted⁹), the silence of the written sources is such that there is simply no written evidence to explore. This is post-Bede. Could there have been similar stresses and strains at an earlier date (about which Bede is silent)? Series R and Q both begin around 710–15, Q perhaps five or ten years later than R. The most the numismatic evidence allows us to say is that west Norfolk was the area most likely to secede.

Let no-one imagine that we have enough single finds! Future discoveries will add to the database and sharpen the focus of the regression analysis, and they will probably modify the conclusions here and there. The dip in the 'isobars' mid-way along the Gipping valley?–Lark valley routeway between the NW and SE quadrants merits better definition. A line on the dating of QIV would be welcome; probably only a hoard could provide such information.

Some die-estimates for QI–III would be interesting, and might help to show its (modest?) scale in relation to R, and perhaps also the changing curve of mint-output – although the absolute chronology of the numerous Q types is very imprecise, and will remain so without an improbable amount of new hoard-evidence. The detailed location of the Q mint could only emerge if archaeologists discovered an impressive *wic*, and excavated its rubbish pits – with sceattas of Series Q a-plenty.

⁹ Cf. D.P. Kirby, *The Earliest English Kings* (1991).

GOUGED REVERSE DIES IN THE QUATREFOIL ISSUE OF CNUT

ROBIN J. EAGLEN AND ROBERT GRAYBURN

Introduction

THIS paper describes and probes the meaning of gouges in reverse dies used at certain mints in the Quatrefoil issue of Cnut.

Added symbols

The only detailed attempt to interpret the meaning of symbols found on late Anglo-Saxon coins, not judged to have been included as part of the engravers' rendering of the prescribed design, was made by Parsons in 1917.¹ His opinion that such symbols, mainly in the form of annulets, crosses and pellets, were added haphazardly by engravers either to differentiate between moneyers of the same name or to distinguish batches of output for control purposes, has not been embraced. In particular, his scepticism on the abbatial or ecclesiastical significance of added annulets, proposed by Andrew,² has been implicitly challenged in more recent studies.³ Setting this frosty reception aside, Parsons made clear that he was excluding 'defaced money' from his survey. By this he meant both coins peck-marked or otherwise scored before acceptance by wary Vikings and 'mutilations of the dies, possibly official, such as the defacing bar found on coins of Thetford in the reign of Edward the Confessor'.⁴

Defaced money

The coins in this paper, struck from gouged reverse dies, fall within the second limb of Parson's definition of defaced money. It may, therefore, be useful to begin by looking briefly at four other examples of defacement in the English hammered series.

A number of obverse dies of Eadred (946–955), possibly used by moneyers working from Bedford and Newport Pagnell, bear four additional pellets in the field around the central cross.⁵ In several instances, there is a prominent flaw where a pellet would be expected. Lord Stewartby has published the late Christopher Blunt's observation that 'what seems to be clear is that the flawing of the obverse dies was deliberate'. Neither eminent numismatist hazarded an opinion on the possible significance of the erasures, but they were obviously intended to modify or cancel the special meaning, understood by the mint officials if not by us, signified by the pellets.

Secondly, in the First Small Cross issue of Æthelred II, dies of Wulfgar at Stamford have been detected with an annulet on the reverse and with the same annulet erased.⁶ This symbol is

Acknowledgements. The writers wish to record their appreciation to the following for the help, in the form of information, photographs and the loan of coins, without which this paper would have been at best a sickly offspring:

Marion Archibald, Joe Bispham, Dr Mark Blackburn, Christopher Glazebrook, Richard Griffin, Bill Lean, Tony Page, Stephen Rexworthy, Mark Senior, Michael Sharp of A.H. Baldwin & Sons Ltd., Mike Vosper and Eva Wiséhn.

Special thanks are due to the institutions and others who have kindly agreed to allow coins in their possession to be recorded in the Appendices and illustrated in the Plates; to Stewart Lyon, Prof. Michael Metcalf and Jan. Lord Stewartby, who not only provided invaluable help and encouragement to the writers during the preparation of the paper, but also read the draft text and gently guided them away from various snares; to Dr Peter Northover, whose purity analysis has a significance well beyond the bounds of this paper and to Jenny Eaglen, who again wrestled manfully (but with feminine grace) to convert her husband's scribbles into intelligible form.

¹ H. Alexander Parsons, 'Symbols and Double Names on Late Saxon Coins', *BNJ* 13 (1917), 1–74.

² W.J. Andrew, 'A Numismatic History of the Reign of Henry I (1100–1135)', *NC* 41 (1901), 1–515, at pp. 363–4.

³ See, for example, Jan Halley Stewart, 'The Stamford Mint and the Connexion with the Abbot of Peterborough under Æthelred II', *BNJ* 28 (1955), 106–110, at p. 108, and Ian Stewart, 'Peterborough and Stamford', *SCMB*, April 1970, 117–20.

⁴ Parsons, 'Symbols and Double Names', as in n.1, p. 3.

⁵ Lord Stewartby (ed.), 'Four Tenth-Century Notes: Unfinished Work of C.E. Blunt', *BNJ* 64 (1994), 33–40, at p. 38.

⁶ Stewart, 'The Stamford Mint', as in n. 3, pp. 106–110.

interpreted by Lord Stewartby, endorsing Wells, as representing a die used by Wulfgar on behalf of the abbot of Peterborough. He conceived that once the abbot had his own moneyer at Peterborough itself, Wulfgar ceased to operate on his behalf at Stamford and the annulet was duly removed from the die. However, the recent discovery of a coin of the First Hand type reading \pm HILDE M-O ME Δ ELTV raises doubts whether the coins already known, reading \pm ME Δ (EL) ..., are evidence of minting at Medeshampstede, the old name for Burg (or Peterborough).⁷ These doubts would resolve into certainty if the name Burg had superseded Medeshampstede by the accession of Æthelred II.⁸ Of course, the possibility that Wulfgar was, and ceased to be, the abbot's moneyer at Stamford is not necessarily undermined by these qualms.

Thirdly, in the Hammer Cross type of Edward the Confessor, as Parsons intimated, coins of the moneyer Blacere at Thetford occur with a diagonal bar across the reverse field (Fig. 1).⁹



Fig. 1. Edward the Confessor, Hammer Cross type, Blacere at Thetford.

This die defacement must be intentional, rather than the result of a die fault, because it occurs on at least two of Blacere's recorded reverses.¹⁰ Although the present writers have not come across any coins struck from those dies in an unbarred state, it is hard to imagine they would have been defaced with a bar by the original engraver(s). Bars are also found elsewhere than on Thetford coins¹¹ and not merely in the Hammer Cross type.¹² The meaning of these defacements has not been unravelled and it is outside the scope of this paper to try to do so. Of the four examples considered, this appears to be the one most closely related to gouging in the Quatrefoil issue.

The final group of coins to be noted is that of the defaced obverse dies in Stephen's first substantive issue, the 'Watford' type. Seaby linked their occurrence to ecclesiastical prompting during the papal interdict.¹³ This view, however, has not met with general acceptance. Much earlier, Brooke was disposed to believe that the dies were intentionally defaced when the mints were in danger of falling into the hands of Stephen's enemies during the anarchy.¹⁴ More recently, Archibald has suggested that the dies had been cancelled officially in anticipation of a new coin type but were temporarily returned to use when the king was suddenly incapacitated by illness in 1142.¹⁵ This much is clear: such blatant defacement of obverses – the embodiment of regal status – could only have been carried out under explicit royal authority, or as a direct challenge to that authority. It is unthinkable that the moneyers or other local officials should have taken the defacement upon themselves. As will be seen below, use of officially cancelled dies, as conjectured by Archibald under Stephen, is not an explanation for the gouged Quatrefoil reverses.

⁷ Gerald T. Dunger, 'A First Hand Type Penny of Æthelred II from the Abbey Mint of Medehamstede, Peterborough', *N.Circ.* September 1999, 209.

⁸ Eilert Ekwall, *The Concise Oxford Dictionary of English Place-Names*, 4th edition (Oxford, 1960), p. 364.

⁹ Eaglen collection. See Baldwin auction 18, 12–13 October 1998, 1554 (illustrated).

¹⁰ See, for example, Carlyon-Britton 1162, same dies as Fig. 1 and 1163, reading \pm BLACER ON Δ ETFO.

¹¹ For example, Ælfrie of Exeter (SCBI Midlands Museums 440) and Godric of Ilchester (446), where the bar dissects one limb of the reverse cross.

¹² For example, Ælfwine of Ilchester, Facing Bust type, Carlyon-Britton 1166 (illustrated), where two parallel diagonal lines are scored in the reverse field.

¹³ Peter Seaby, 'King Stephen and the Interdict of 1148', *BNJ* 50 (1980), 50–60; Peter Seaby, 'The Defaced Pennies of Stephen from Sussex Mints', *BNJ* 56 (1986), 102–7.

¹⁴ George Cyril Brooke, *A Catalogue of English Coins in the British Museum. The Norman Kings*, 2 vols (London, 1916), 1, p. lxxx.

¹⁵ Marion M. Archibald, 'Dating Stephen's First Type', *BNJ* 61 (1991), 9–22, at pp. 13, 19–20.

A further example from the Last Small Cross type of Æthelred II, directly relevant to this study, is reserved for discussion below.

Descriptive analysis

Identification of gouges

Gouges as a distinctive form of defacement were first described by Blackburn and Lyon in their impressive study of regional die production in Cnut's Quatrefoil issue, published in 1986. They drew attention to the loose, almost round quatrefoils on reverses of Stamford style dies and observed that 'on several dies a wide bar has been gouged out of one quarter'.¹⁶ One of the present writers (Grayburn) has pursued an interest in coins with this feature since the extensive but unrecorded 'Cnut' hoard (c.1993) began to appear on the market, obtaining examples with Huntingdon and Stamford mint signatures as the opportunity arose. The other writer (Eaglen) also acquired specimens with the Huntingdon mint signature and has dealt briefly with their possible significance in his study of the Huntingdon mint.¹⁷ The friendly rivalry in tracking down Huntingdon coins from the hoard mellowed into this collaborative study.

Hildebrand, the colossus of late Anglo-Saxon numismatics, does not appear to have recognised the gouges as distinctive.¹⁸ Only in one instance (Hild. 3327, from a gouged die) does he cryptically label the coin as a variety ('var.') of the preceding coin (Hild. 3326, ungouged), struck from the same obverse but a different reverse die. Moreover, no examples are observable from the main auctions of Anglo-Saxon coins in the last sixty years or so, including the Lockett, Elmore Jones, Mack and Doubleday sales.

In the *SCBI* volumes, coins struck from gouged reverses either pass unnoticed or ignored, possibly because they were seen as exhibiting die flaws and consequently unworthy of mention, or are construed as outsize pellets. For example, *SCBI* Copenhagen 3652 and 3653 are from the same dies of Swertbrand at Stamford. Although the former coin is from a gouged reverse and the latter is not, the sylloge, published in 1970, draws no distinction between them. In *SCBI* East Anglian Museums, published in 1992, the evidence of gouging on a reverse of Leofsig of Bedford (1037) is expressly described as a die flaw. In *SCBI* Lincolnshire Collections, published in 1981, a gouged reverse of Godleof at Stamford (1243) is identified as a 'large pellet'.

It is admittedly not always easy to distinguish intentional gouging from added pellets or chance flaws, especially when working from photographs or illustrations rather than actual coins. Difficulties are most acute with the rare dies inconspicuously gouged near the edge rather than boldly in the field. To help advance this study, distinguished acquaintances of the writers, with the selfless generosity typical of the numismatic world, have kindly drawn attention to a number of coins apparently from gouged dies. The writers have, however, concluded that some of these do not exhibit gouging. In deference to the writers' undoubted fallibility, however, the more important of these coins have been listed in Appendix II with reasons for their exclusion from the main catalogue of coins in Appendix I.

Description of gouges

The gouges which this paper addresses are hollows made by graving tools in the surface of the reverse die. That the defacement occurred at the mint rather than at the hands of the original engraver is shown by the use of the same dies in a gouged and an ungouged state. Copenhagen 3652 and 3653, already referred to, are examples of this. Local intervention is also suggested by the relative crudeness with which the gouges are executed. That the resulting protrusions on coins struck from the dies are not caused by hammering the obverse of the coins themselves is proved

¹⁶ Mark Blackburn and Stewart Lyon, 'Regional die-production in Cnut's Quatrefoil issue', *Anglo-Saxon Monetary History*, edited by M.A.S. Blackburn (Leicester, 1986), pp. 222–72, at p. 238. For the sake of succinctness, in this study, the quatrefoils described by Blackburn and Lyon are described as 'flattened', or '(f)'.

¹⁷ Robin J. Eaglen, 'The Mint of Huntingdon', *BNJ* 69 (1999), 47–145, at pp. 70–1.

¹⁸ Bror Emil Hildebrand, *Anglosachsiska Mynt* (Stockholm, 1881).

by die duplicates with identically shaped protrusions in the same position on the reverse. The coins, nevertheless, usually have matching depressions on the obverse. This occurs quite commonly on hammered coinage where a prominently engraved feature on the reverse die shows as an incuse image on the obverse. Its occurrence may help to settle whether an ambiguous protrusion is the result of gouging or merely a flaw.

The gouges are not consistent in shape or position. Typically they are capsule shaped but may also be boldly rectangular or approximately round, thus resembling chubby pellets. Very rarely the shape may be asymmetrical. They are usually found in one of the four quarters of the reverse cross, although occasionally they intercept a limb of the cross and, as already mentioned, may rarely occur in the legend towards the edge of the die. One die has a rectangular gouge in the second heraldic quarter and a capsule-shape gouge in the third.¹⁹ This coin raises in its most extreme form the question, to be discussed below, whether the position of the gouges is significant. Figure 2 illustrates the main shapes of gouge encountered and an example of a resultant incuse obverse image.

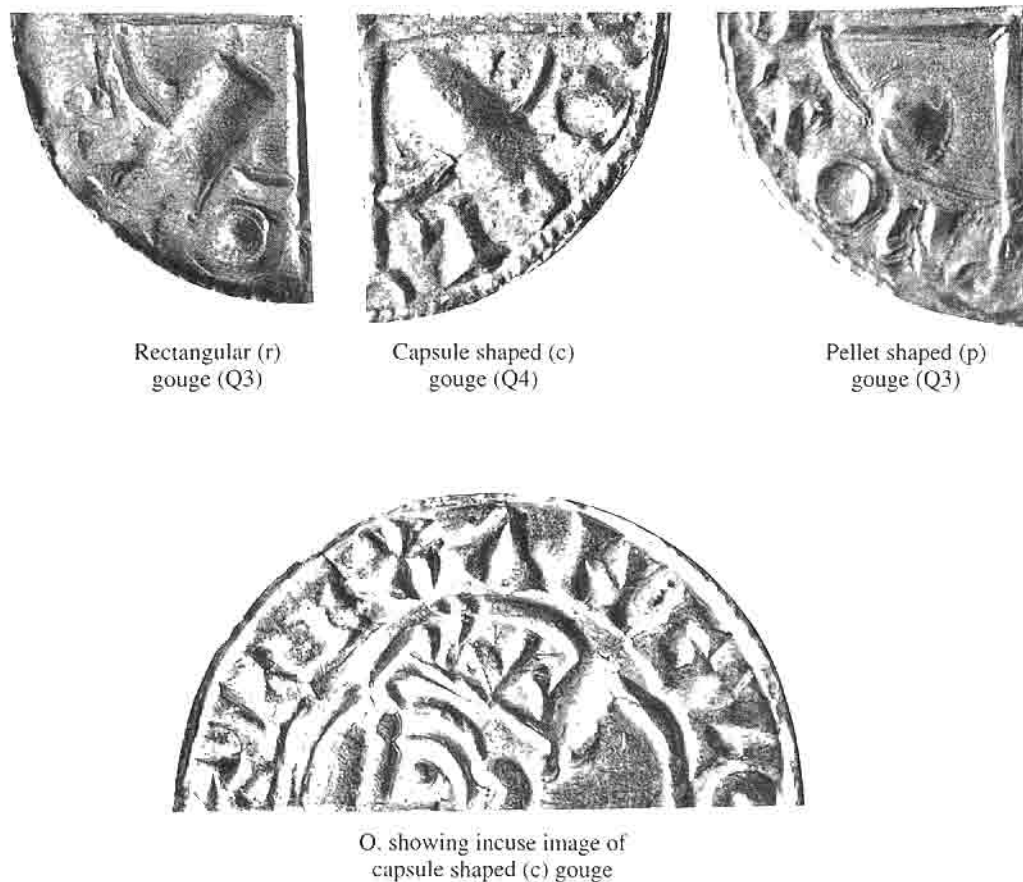


Fig. 2. Gouged dies ($\times 4.3$)

The mints and coins

Apart from Huntingdon and Stamford, gouged dies have been found from the mints of Bedford, Cambridge, Leicester, Northampton and, remarkably, considering the geographical location of all the others, from Rochester. Although the writers have been able to study Huntingdon and Stamford output in greater depth, gouging of dies from the other mints appears to have occurred

¹⁹ SCBI Latvia 95 (Wulfnoth of Leicester).

more rarely. Appendix I lists all coins traced, struck from dies linked with gouged reverses. It thus includes coins struck from reverses in both their gouged and ungouged state and other obverses linked to those ungouged reverses. It records the position and shape of the gouge, the die identity and the die-cutting style of the obverse and reverse, and the weight of each coin. It also indicates whether the quatrefoil is shaped or flattened, a feature of reverses linked to London, Stamford and Thetford style obverses.²⁰ Die combinations which have not hitherto been published are illustrated in Plate 1 and identified by an asterisk in Appendix I and by Plate number in Appendix IV. Fifty-two of the seventy-five coins traced are from Stamford mint and struck from thirty-four gouged reverse dies. The number of reverses known from a single specimen suggests that statistically at least fourteen more dies would have been gouged than are known from Stamford.²¹ Further gouged dies may also surface from the other mints, particularly Huntingdon.

Metcalf has estimated that at least 123 'equivalent' reverse dies were used at Stamford in the Quatrefoil issue.²² The 'equivalent' gouged reverses, based on the Stamford coins listed in Appendix I, amount to not less than forty-eight, or approximately forty per cent of Metcalf's total. Some of these gouged dies, are known in an ungouged as well as gouged state. This has the effect of reducing the potential volume of coinage struck from gouged as compared with ungouged dies. It is reflected in the 165 surviving coins recorded by Petersson, compared with the fifty-two coins (or thirty-two per cent) struck from gouged reverses listed in Appendix I, netted from a wider trawl, including the Cnut hoard of c.1993.²³ Nevertheless, it is clear that gouging was a significant feature of Stamford output. In contrast, at Huntingdon, only eight gouged reverses are known out of a total of seventy-seven 'equivalent' Quatrefoil reverse dies estimated by Eaglen in his study of the Huntingdon mint.²⁴ This suggests that approximately ten per cent of Huntingdon output was gouged. No meaningful percentages can be calculated for the remaining five mints, but they must have been insignificant owing to the rarity of surviving coins struck from gouged dies.

Significantly, one of the writers (Grayburn) noted in 1998 that gouges were also present on a number of Stamford reverses in the Last Small Cross type of Æthelred II. Those which have come to the writers' notice are listed in Appendix III. They are all associated with Lincoln Cl obverses and have elongated rectangular gouges in various orientations, either touching or intersecting the inner circle and thereby encroaching on the legend. The weight range of eleven coins identified is between 1.14 and 0.93 g. So far, no examples have come to light from other mints which strongly suggests that the practice of gouging originated in Stamford.

As will be seen from Table 1, at least thirteen of the nineteen moneyers recorded at Stamford used gouged reverse dies in the Quatrefoil type. Of these, Godwine and Cawelin account for forty per cent of the known reverses. In the Last Small Cross issue of Æthelred II seven moneyers out of seventeen are found to have used gouged reverses. Of the five who continued to strike in the following Quatrefoil type, Æscman is the only one for whom no gouged dies have so far appeared, suggesting there was some continuity of moneyers engaged in the practice between the types. This is reinforced by two of the four remaining moneyers who struck in both issues not being known for gouges in either type. Interestingly, as Stewart Lyon has pointed out to the writers, Table I suggests that ten moneyers were active at the point of change between the three substantive types at Stamford.

²⁰ Blackburn and Lyon, 'Regional die-production', as in n.16. See pp. 226–46 for a description of the styles identified and Plates 13.5 (p. 239), 13.6 (p. 243) and 13.8 (p. 247) for illustrations of flattened quatrefoils.

²¹ The figure is calculated using the formula:
 estimated ('equivalent') reverse dies = $\frac{X \times Y}{\overline{X - Z}}$

where

X = total number of known coins

Y = total number of known reverse dies

Z = total number of known coins less those uniquely representing a reverse die (so-called 'singletons').

²² D.M. Metcalf, 'Continuity and Change in English Monetary History, c.973–1086, Part 2', *BNJ* 51 (1981), 52–90, at pp. 80–3.

²³ H. Bertil A. Petersson, 'Coins, Weights, Late Anglo-Saxon Pennies and Mints, c.973–1066', *Studies in Late Anglo-Saxon Coinage*, edited by Kenneth Jonsson, Numismatiska Meddelanden XXXV (Stockholm, 1990), 207–434, at p. 326.

²⁴ Eaglen, 'The Mint of Huntingdon', as in n. 17, p. 64.

TABLE 1: Incidence of gouged reverse dies at Stamford.

<i>Moneyer</i>	<i>Æthelred II Last Small Cross</i>	<i>Cnut</i>	
		<i>Quatrefoil</i>	<i>Pointed Helmet</i>
Ælfwig		+ g ³	
Æscman	+ g ¹	+	+
Æscwig	+		
Æthelwine	+		
Agisman		+	+
Brandr		+ g ¹	
Brunstan	+ g ²	+ g ¹	
Cawelin		+ g ⁶	+
Eadwine	+	+	+
Fargrimr		+	
Goddaeg	+ g ⁴		
Godhere	+		
Godleof	+ g ²	+ g ¹	
Godric	+	+	
Godwine	+ g ¹	+ g ⁸	+
Leofgod	+		
Leofric		+ g ²	
Leofsig		+ g ¹	+
Leofwine	+ g [?]	+ g ¹	+
Morulf		+ g ¹	+
Osmund	+		
Oswald		+ g ³	+
Svart	+	+	
Swertbrand	+	+ g ²	
Swertgar	+ g [?]		
Thurstan	+	+ g ¹	+

Notes: g¹ = gouged; adjoining numeral = no. of coins known.

The remaining mints present a very different picture, as Table 2 illustrates. Huntingdon, the closest mint to Stamford, accounts for eight of the sixteen gouged reverses, used by four moneyers. Cambridge, possibly the most active of all the mints being considered (including Stamford) in the Quatrefoil issue accounts for only two dies from separate moneyers. The remaining mints, although rather less active in the type than Huntingdon, again account for only one or two dies each.

TABLE 2: Gouged reverse dies at mints other than Stamford in the Quatrefoil issue.

<i>Mint</i>	<i>Number of moneyers</i>		<i>Number of R. dies known</i>
	<i>Total</i>	<i>Using gouged R.</i>	
Bedford	7	2	2
Cambridge	10	2	2
Huntingdon	12	4	8
Leicester	4	1	1
Northampton	4	1	2
Rochester	4	1	1
Total	41	11	16

Apart from Rochester, the mints all fall within a forty-two mile radius of Stamford, as Figure 3 illustrates.



Fig. 3. Location of mints associated with gouged reverse dies.

Lincoln and Nottingham are also within the circle, but apparently not involved in gouging. The former was an important die-cutting centre in its own right and supplied the needs of Nottingham, which is closer to Lincoln than to Stamford. The geographical outcast, Rochester, will be considered later.

The moneyers

Within the circle drawn in Figure 3, seven moneyers' names recur at two or three of the mints using gouged dies in the Quatrefoil issue. These are listed in Table 3. It is legitimate to ask whether each is a different person or could be the same person moving from one centre to another, or even combining responsibility at more than one centre. Where the recurrent name is common, such as Godric or Godwine, it may be futile to pursue the question. But where the name is unusual, such as Godleof, it may be worthwhile to explore the namesakes' activities. In particular, the use of gouged dies by namesakes could be more than coincidental. This suggests that the outputs of Godleof, Leofsige and Leofwine merit attention.

The name Godleof vanishes after the Quatrefoil issue at Stamford and appears in that issue at Huntingdon, as an important contributor to output in that and the following, Pointed Helmet type. Since, however, Quatrefoil pence are known at both mints in the weight range 1.02–0.84 g, it is

TABLE 3: Quatrefoil type. Recurrence of moneyers' names at mints with gouged reverse dies.

Moneyer	Stamford	Bedford	Cambridge	Huntingdon	Leicester	Northampton
Ælfwig	g		ng		ng	
Godleof	g			g		
Godric	ng	ng		ng		
Godwine	g	ng	ng			
Leofing		ng ¹				ng
Leofsige	g	g ¹	ng			
Leofwine	g	ng				g

Note: ¹ Struck from the same obverse die.

Key: g = (not) gouged; ng = not gouged.

not safe to conclude that Godleof simply moved from Stamford to Huntingdon. Therefore, given his unusual name and importance as a moneyer, a short tenure at both mints in the Quatrefoil issue should not be ruled out. The towns were, after all, only twenty-seven miles apart.

Leofsige functions briefly under the Bedford mint signature, using an 'Anomalous'²⁵ obverse at the highest weights recorded for coins struck from gouged dies of 1.19, 1.16 and 1.09 g. The writers have not come across any other Bedford dies in his name without gouges. The name Leofsige is also found at Stamford, on coins in the range 1.24–1.00 g and continues into the Pointed Helmet type. Thus, unless different persons are denoted, some temporary form of combined responsibility could again be construed. Curiously, the Anomalous obverse was used by Leofing of Bedford to strike an ungouged coin at 1.09 g, but the writers have not come across any Stamford coins bearing that name until the Pointed Helmet issue.

Interpretation of coins with the name Leofwine appears more clear-cut. Relatively common in the Anglo-Saxon series, it occurs in the Quatrefoil and adjacent types at Bedford, Northampton and Stamford. In the Quatrefoil issue Leofwine appears to be the leading moneyer at both Bedford and Northampton. On these counts, separate persons at each location are assumed.

As already noted, a majority of the Quatrefoil moneyers at Stamford used gouged reverse dies, thus drawing upon both major and minor contributors to the overall mint output. Apart from distant Rochester and from Bedford, where Leofsige may have enjoyed some special relationship with Stamford mint itself, the remaining mints all engaged their main, or at least a major moneyer in the use of gouged reverse dies.²⁶ This is shown in Table 4. Of the three minor moneyers at Huntingdon, Sæwine had been very active towards the end of Æthelred II's reign, but is only known from a solitary coin in the Quatrefoil issue, weighing 0.85 g, with the gouge erasing an indistinct symbol. The moneyer 'Man' is known from one reverse existing both in a gouged and ungouged state and reading +M/AN/ ON /HV. The lettering is so large that space for the inscription is severely limited. He could thus be the moneyer Manwine who is known from a coin in the Last Small Cross issue of Æthelred II. The third minor participant, Thurcetel, is so far only known from gouged reverses, of which there are four. The impression is that Godleof was joined by moneyers who were plucked out of obscurity (Sæwine and Manwine) or not otherwise involved as a moneyer in the minting process (Thurcetel) for the gouged output under the Huntingdon signature. The gouge on the die used by Man(wine), however, is at the edge of the coin and could – as will be seen below – signify something different from the usual gouges cut into the reverse field.

²⁵ See Blackburn & Lyon, 'Regional die-production', as in n. 16, p. 272.

²⁶ This assessment is based on activity levels suggested by the occurrence of coins in the systematic collection at Stockholm (Hildebrand) and in the SCBI Copenhagen sylloge, except for Huntingdon, where the figures are from Eaglen, 'The Mint of Huntingdon', as in n. 17, p. 64. Leofsige was prolific in the Quatrefoil issue at Cambridge, but none of his reverses is so far known in a gouged state. See Kenneth A. Jacob, 'The Mint of Cambridge', *SCMB*, February 1984, 34–43, at p. 36.

TABLE 4: Quatrefoil type. Importance of moneyers using gouged reverse dies.

<i>Mint/Moneyer</i>	<i>Main</i>	<i>Important</i>	<i>Minor</i>
Bedford Leofsige			+
Cambridge Omst Wulfsige	+	+	
Huntingdon Godleof Man(wine) Sæwine Thurcetul	+		+
Leicester Wulfnoth		+	
Northampton Leofwine	+		
Rochester Ælfwold			+

Sources of dies

The sources of dies for coins in this study are set out in Appendix I. At Stamford almost all the gouged reverses are associated with Stamford A and B style obverses and reverses with flattened quatrefoils. The exceptions are two sets of dies of Lincoln style and two others of Anomalous style. No coins struck from any of these dies weighs more than 0.98 g, confirming gouging as a 'late' feature. Two reverses used with Stamford B style obverses are known in both ungouged and gouged state but none with Stamford A style obverses is known with ungouged reverses. This shows that die-cutting at Stamford began before gouging was introduced and suggests that Stamford B style dies preceded those of Stamford A style.²⁷ This is supported by the difference between eighteen coins struck from Stamford A obverses with an average/median weight of 0.82/0.83 g, compared with thirty-three coins from Stamford B obverses at 0.90/0.93 g.

The Anomalous obverses at Stamford are used with reverses displaying flattened quatrefoils. Such reverses are encountered elsewhere with London and Thetford style obverses, but no London obverses are known to have been used by Stamford moneyers at this time, nor Thetford style obverses with flattened quatrefoil reverses, so the Stamford origin of the Anomalous die pairings must be a distinct possibility. The alternative interpretation, that Stamford engraved its own obverses but took its flattened quatrefoil reverses from London is not credible, especially as almost all have the copulative MO rather than ON.

At the remaining mints the die pairings used mainly originate from Lincoln, London or Thetford, but Stamford also figures and five moneyers, Man(wine), Sæwine and Thurcetul of Huntingdon, Wulfnoth of Leicester, and, possibly, Leofsige of Bedford, combine obverse and reverse dies from disparate sources.

Stamford A dies were apparently used by Leofwine of Northampton, although the writers have been unable to inspect the coin referred to, and by Ælfwold of Rochester. Amongst the disparate pairings Wulfnoth of Leicester used a Winchester style obverse – a regular source for Leicester dies – with a reverse cut at Stamford and Thurcetul of Huntingdon a Stamford B style obverse with two reverses containing the copulative ON, seemingly cut in London as were all the other

²⁷ Blackburn & Lyon, 'Regional die-production', as in n. 16, tentatively suggests the opposite conclusion.

recorded dies he employed. It may, in fact, be significant that with very rare exceptions the known Stamford style dies were all used either at Stamford or at other mints involved in gouging.²⁸

The other disparate pairings include the coin of Sæwine of Huntingdon, where a late London style obverse is combined with a reverse displaying a shaped quatrefoil and MO copulative, logically associated with the Lincoln die-cutting centre. Also from Huntingdon, the moneyer Man(wine) used a Bedford style obverse with a reverse probably from the same source (at 1.18 g), subsequently combined with a late London A style obverse. In this combination there is an ungouged example at 1.00 g and two examples with an edge gouge at 1.08 and 1.03 g. These coins are the heaviest gouged examples encountered, apart from those of Leofsig of Bedford, and the edge gouge could well put these coins into a different category from those gouged in the field. The Anomalous obverse used by Leofsig and Leofing of Bedford is quite different in style from the Anomalous obverses (of Godwine and Swertbrand) at Stamford alluded to above. The three associated reverses, two of Leofsig and one of Leofing, all have flattened quatrefoils and the ON copulative associated with the London die-cutting centre but could perhaps equally well have been engraved locally. This uncertainty, coupled with the relatively heavy weights of the coins themselves, bedevils any attempt to explain how they fit into the gouged series.

The source of dies has been treated in some detail because it shows that Stamford relied substantially on its own die production during the period of gouging and that the other mints involved not only put together unusual pairings from different sources but also supplemented their usual sources with dies cut at Stamford. This suggests that the dies were assembled to meet some pressing need, a theme to be developed below.

Weight of coins

One of the writers (Eaglen) has shown that no difference in weight standard was detectable between coins struck from gouged and ungouged reverses under the Huntingdon mint signature in the Quatrefoil issue.²⁹ This conclusion is echoed by the larger number of coins and additional mints included in the present study. Appendix I lists twenty-one coins where reverse dies exist in both a gouged (11) and ungouged (10) state. The average weight of each group is 0.94 g. Furthermore, taking coins struck at Stamford from Stamford A and B style dies in the systematic collection at Stockholm (Hildebrand) and the Copenhagen sylloge, the average weight of eight coins struck from ungouged reverses was 0.93 g, compared with thirteen from gouged reverses at 0.89 g. On these figures, any idea that gouging was introduced to highlight weight standard differences is clearly untenable.

Interpretative analysis

It is obvious from the boldness, not to say crudity, of the gouging that it was intended to be noticed. It was an overt statement that something out of the ordinary was taking place. It is also clear that the cryptic message was addressed to administrators of the coinage and not to the public at large. Otherwise the occasion for this paper would not arise. The gouging cannot have been off-putting to coin users since coins from such dies nestle comfortably amongst coins from ungouged dies in both English and Scandinavian hoards. Indeed, the failure of numismatists to recognise gouges as distinctive until recent years shows how they must have passed unnoticed through the hands of most users.

There are four key features of any coinage: the design, the weight, the purity and the framework of authority within which the coinage is struck and issued. The design may be vital in inspiring confidence when engaging in monetary transactions and signify coins which are legal tender, for example, when paying taxes. This paper is not, of course, concerned with the Quatrefoil design as such.

²⁸ For example, Hild. 3517 (Leofwine of Thetford, 0.90 g); SCBI Copenhagen 3185 (Leofwine of Norwich, 0.90 g).

²⁹ Eaglen, 'The Mint of Huntingdon', as in n. 17, p. 71.

Weight standards

The question of weight has already been broached. Given that, at this period, each coin type was issued at several different weight standards during its productive life, once the coin was in circulation it could be difficult to establish if it had complied with the standard current at the time it was struck or not. The use of the same dies across more than one standard would transform this difficulty into impossibility. It follows that compliance with weight standards must have been regulated at the mint workshop, or exchange, before the coins entered the public domain. This would have been quite simple to organise. Thus, gouging should be associated neither with weight as such, nor with weight standards.

Weight at this period is, nevertheless, generally agreed to have had a temporal significance, the heavier coins normally being struck earlier than the lighter. The question may, therefore, legitimately be asked whether the quarter in which the gouges appear could also have a temporal significance. For this to be so, the weights of the coins in this study, sorted by gouged quarter, should be clearly differentiated. Taking the intact coins of Stamford unambiguously gouged in one quarter, there is a material difference in the average weights of sixteen coins with Q2 gouges and fourteen coins with Q3 gouges, as Table 5 shows. Since, however, coins struck from Stamford B style dies tend to be heavier than those from Stamford A style dies, Table 6 plots the relationship between weight, die style and Q2–3 gouges, to ascertain whether die style, the position of the gouge, or both, reflect the weight standard. The table points to a correlation between Stamford B style dies and Q2 gouges at the heavier weights and Stamford A style dies and Q3 gouges at the lighter, with a switch between styles and gouge position at about 0.88 g. The symmetry of this picture is marred by two Stamford B style coins with Q2 gouged reverses, struck at 0.84 g and 0.78 g. Die duplicates would be needed to determine if these dies were brought into use at the lighter standard or carried over in use from the heavier standard. This still leaves the question of fitting Q1 and Q4 gouges into the scheme of things. Although Q1 gouges are only known from four coins they appear to have been used at both weight standards, whereas the three known specimens of Q4 gouges are all used at the heavier standard. It follows that, despite the evidence of Q2 and Q3 gouges, the quarter selected for gouging cannot be claimed to have a temporal significance.

TABLE 5: Relationship between gouged quarter and weight of Quatrefoil pence at Stamford.

	<i>Number of coins</i>	<i>Weight (g)</i>	
		<i>Spread</i>	<i>Average</i>
Q1	4	0.73–1.00	0.88
Q2	16	0.78–0.98	0.90
Q3	14	0.65–0.98	0.78
Q4	3	0.93–0.96	0.95

Purity

The third key feature is purity. This would also doubtless have been closely regulated at the mint workshop. If more than one purity standard was applied during the life of a type, purity control could only be exercised, once the coin was in circulation, by linking purity to weight. If the weight standard changed but the purity standard did not, or both changed in tandem, no problem would arise. But if the purity standard changed in the course of the same weight standard control would be lost. It would then become impossible to identify an excessively alloyed coin at a given weight as long as it did not fall markedly below the lower of the two purity standards. The only

TABLE 6: Relationship between weight, gouged quarter (Q2, Q3) and die style (Stamford A and B) of Quatrefoil pence at Stamford.

Weight (g)	Q2		Q3	
1.00–0.99				
0.98–0.97	BB			
0.96–0.95	BBB			
0.94–0.93	BB	A ¹		
0.92–0.91	B			
0.90–0.89	BB			
0.88–0.87			A ²	B ³
0.86–0.85		AA		
0.84–0.83	B		AA	
0.82–0.81		A ¹	A	
0.80–0.79			A	
0.78–0.77	B	A		B ⁴
0.76–0.75			A	
0.74–0.73			A ²	
0.72–0.71				B ³ B ⁴
0.70–0.69				
0.68–0.67			A ²	
0.66–0.65			A	

Notes: ¹ Same dies.

² Same obverse die.

³ Same obverse die.

⁴ Same dies.

way of overcoming this defect would have been to subject the currency to scrutiny for both weight and purity at the mint before issuing it. If, subsequently, any gross defect or fraud came to light the moneyer whose name appeared on the coin was held accountable. From the foregoing it is clear that special markings or defacements to highlight purity changes, if such changes took place, would be otiose.

Despite the excellent work of Metcalf and Northover,³⁰ much remains to be done in analysing the metal content of Anglo-Saxon coinage. In their *BNJ* paper in 1986, they reproduced the results of electron-probe micro-analysis of sixty-two coins of the Quatrefoil type from the Bryn Maelgwyn hoard (1979–80).³¹ All but eight of the coins were from the Chester mint. Of these, most were light in weight and therefore presumed to have been struck late in the issue, but there were also three heavier/earlier coins. The coins exhibit a consistently high level of purity. The spread was between 97.87 and 90.51% silver content, averaging 94.77%. For this purpose ‘silver’ was defined as Ag + Au + Pb, since that is what would have been recognised as silver at the time the coins were struck. The hoard also contained two coins from Stamford struck from ungouged dies. One of these, by the moneyer Cawelin, was also analysed and found to contain 94.04% silver. These results mirrored the levels of purity encountered by Metcalf and Northover in the other types they analysed from the reigns of Æthelred II and Cnut.

Dr Northover was requested by the writers to analyse a number of coins with Huntingdon and Stamford mint signatures, to determine if significant differences could be detected between the purity of coins struck from gouged and ungouged dies of Stamford in the Last Small Cross issue of Æthelred II and of Huntingdon and Stamford in the Quatrefoil issue of Cnut. The most meaningful selection was made for analysis subject to limitations of cost and accessibility. The results from twenty-four coins, including the Cawelin example from the Bryn Maelgwyn hoard, are set out in Table 7. A greater degree of sophistication has resulted in silver being redefined to include Bi, but this has an immaterial effect upon the comparison with the Bryn Maelgwyn results.

³⁰ D.M. Metcalf and J.P. Northover, ‘Interpreting the Alloy of the Later Anglo-Saxon Coinage’, *BNJ* 56 (1986), 35–63.

³¹ At pp. 56–9.

TABLE 7: Purity analysis (%) of (un)gouged coins of Huntingdon and Stamford mints, conducted by Dr P.J. Northover.¹

<i>Moneyer</i>	<i>Fe</i>	<i>Co</i>	<i>Ni</i>	<i>Cu</i>	<i>Zn</i>	<i>As</i>	<i>Sb</i>	<i>Sn</i>	<i>Ag</i>	<i>Bi</i>	<i>Pb</i>	<i>Au</i>	<i>S</i>	<i>Ag+Bi+Pb+Au</i>	<i>Remarks</i>	<i>Weight(g)</i>
<i>Æthelred II, Last Small Cross type – Stamford</i>																
(1) Godleof	0.01	0.01	0.01	3.35	0.07	0.01	0.01	0.00	95.09	0.03	0.96	0.44	0.01	96.52		1.57
(2) Swertgar	0.01	0.01	0.02	6.73	0.58	0.01	0.00	0.00	91.17	0.07	0.97	0.41	0.01	92.62	pellet on R.	1.07
(3) Æscman	0.01	0.00	0.01	10.12	1.15	0.03	0.00	0.00	86.57	0.07	0.97	1.05	0.02	88.66	gouged (6.30 o/c)	1.05
(4) Godwine	0.02	0.01	0.02	13.17	2.11	0.02	0.00	0.00	83.21	0.08	0.98	0.36	0.02	84.63	gouged (12.30 o/c)	0.95
(5) Godwine	0.02	0.01	0.02	21.15	4.15	0.02	0.05	0.00	73.05	0.06	1.12	0.32	0.02	74.55		1.08
<i>Cnut, Quatrefoil type – Huntingdon</i>																
(6) Eadnoth	0.01	0.01	0.03	4.11	0.20	0.02	0.00	0.00	94.12	0.02	1.09	0.39	0.01	95.62		1.23
(7) Man(wine)	0.00	0.00	0.01	5.29	0.33	0.02	0.00	0.00	93.10	0.05	0.78	0.42	0.00	94.35	gouged at edge	1.08
(8) Thurcetel	0.03	0.01	0.01	9.86	3.04	0.02	0.01	0.00	85.31	0.06	1.28	0.35	0.03	87.00	gouged (Q3)	0.89 ²
(9) Godleof	0.02	0.01	0.01	12.31	2.26	0.02	0.01	0.00	83.88	0.07	1.09	0.33	0.00	85.37		1.00
(10) Godleof	0.01	0.01	0.01	14.27	3.07	0.01	0.01	0.00	80.85	0.05	1.41	0.29	0.01	82.60		0.91
(11) Godleof	0.02	0.01	0.01	15.77	2.86	0.04	0.01	0.00	79.78	0.04	1.13	0.32	0.01	81.27	gouged (Q4)	0.91
(12) Thurcetel	0.01	0.01	0.01	14.99	4.01	0.02	0.00	0.00	79.15	0.04	1.45	0.27	0.02	80.91	gouged (Q3)	0.88 ²
(13) Eadnoth	0.03	0.01	0.01	25.10	6.61	0.05	0.01	0.00	66.39	0.06	1.45	0.27	0.02	68.17	pellet behind bust	0.85
<i>Cnut, Quatrefoil type – Stamford</i>																
(14) Cawelin	tr	tr	0.02	4.26	0.33	–	–	–	93.06	0.85	0.81	0.17	–	84.89		1.00
(15) Eadwine	0.00	0.00	0.01	5.96	0.35	0.00	0.01	0.00	92.28	0.07	0.95	0.35	0.01	93.65	annulets in cusps	0.96
(16) Godwine	0.01	0.01	0.00	6.55	0.47	0.01	0.00	0.00	9.51	0.06	0.97	0.40	0.01	92.94		1.00
(17) Cawelin	0.01	0.01	0.01	7.57	1.53	0.01	0.01	0.00	89.08	0.05	1.40	0.33	0.00	90.86	gouged (Q2)	0.94
(18) Cawelin	0.01	0.01	0.00	8.90	1.14	0.03	0.00	0.00	88.64	0.05	0.87	0.35	0.00	89.91	gouged (Q4)	0.96
(19) Cawelin	0.00	0.01	0.02	10.33	1.19	0.02	0.00	0.00	87.10	0.07	0.96	0.31	0.00	88.44		1.00
(20) Morulf	0.02	0.01	0.02	13.47	2.39	0.03	0.01	0.00	82.33	0.03	1.36	0.32	0.01	84.04	gouged (Q2)	0.97 ³
(21) Thurstan	0.00	0.00	0.01	14.84	3.31	0.05	0.00	0.00	80.03	0.03	1.41	0.30	0.01	81.77		0.79
(22) Morulf	0.01	0.02	0.02	15.01	3.81	0.01	0.01	0.00	79.72	0.04	0.99	0.34	0.01	81.09	gouged (Q2)	0.98 ³
(23) Oswald	0.04	0.00	0.01	18.19	4.11	0.02	0.00	0.00	76.04	0.15	1.23	0.19	0.01	77.61	gouged (Q3)	0.88
(24) Leofwine	0.04	0.01	0.01	23.12	6.28	0.02	0.00	0.00	68.83	0.06	1.38	0.26	0.00	70.53		0.93

Notes: ¹ The coins analysed from Appendix I are indicated by a cross(†) alongside the weight in the Appendix. For the identity and source of illustrations of these coins, see Appendix V.

^{2,3} Die duplicates.

Regardless of gouging, the most important finding from this analysis is the number of markedly alloyed coins and the range of their debasement. In the Last Small Cross issue of Æthelred II the spread was from 96.52 to 74.55% silver content and in the Quatrefoil type 95.62 to 70.31%. This points to the need for more coins to be analysed at other mints in both types to establish to what extent Chester or Huntingdon/Stamford reflected the norm. In terms of gouging, both the purest and basest Last Small Cross and Quatrefoil coins were struck from ungouged dies. This effectively disposes of any suggestion that gouging was the badge of debasement. Although the sample is small, there is some evidence of a relationship between weight and purity, the heaviest coins ((1), (6), (7)) also being the purest and the most debased coins being amongst the lightest. In the Quatrefoil issue at both Huntingdon and Stamford the purity of coins struck from gouged dies is not significantly different within the same weight parameters from coins struck from ungouged dies, although the purity range appears somewhat wider. The moneyer Man(wine) at Huntingdon provides the heaviest gouged example but, as already noted, since the coin is defaced at its edge, the gouge may be embodying a distinctive control message.

The only significant alloying elements were Cu and Zn, added as brass or as a mixture of brass and copper. The mix varies quite markedly between the coins analysed. Figure 4 shows the relationship between Cu and Zn for the coins struck from gouged reverse dies at Huntingdon and Stamford in the Quatrefoil issue. Excluding the coin of Man(wine) of Huntingdon, the moneyers at both mints operate within the range 10–17% Cu and 2–4% Zn, except for Cawelin of Stamford whose coins are less alloyed. The regression line in the Figure is projected at the value of $5\text{Cu} = \text{Zn}$. Dr Northover has confirmed that the maximum Zn content of the equivalent brass at 22% is well within the limits of the cementation process by which brass was produced at a time when zinc metal was not available. The analysis of die duplicates from Thurcetel of Huntingdon and Morulf of Stamford suggests that neither pair was struck from the same batches of metal.

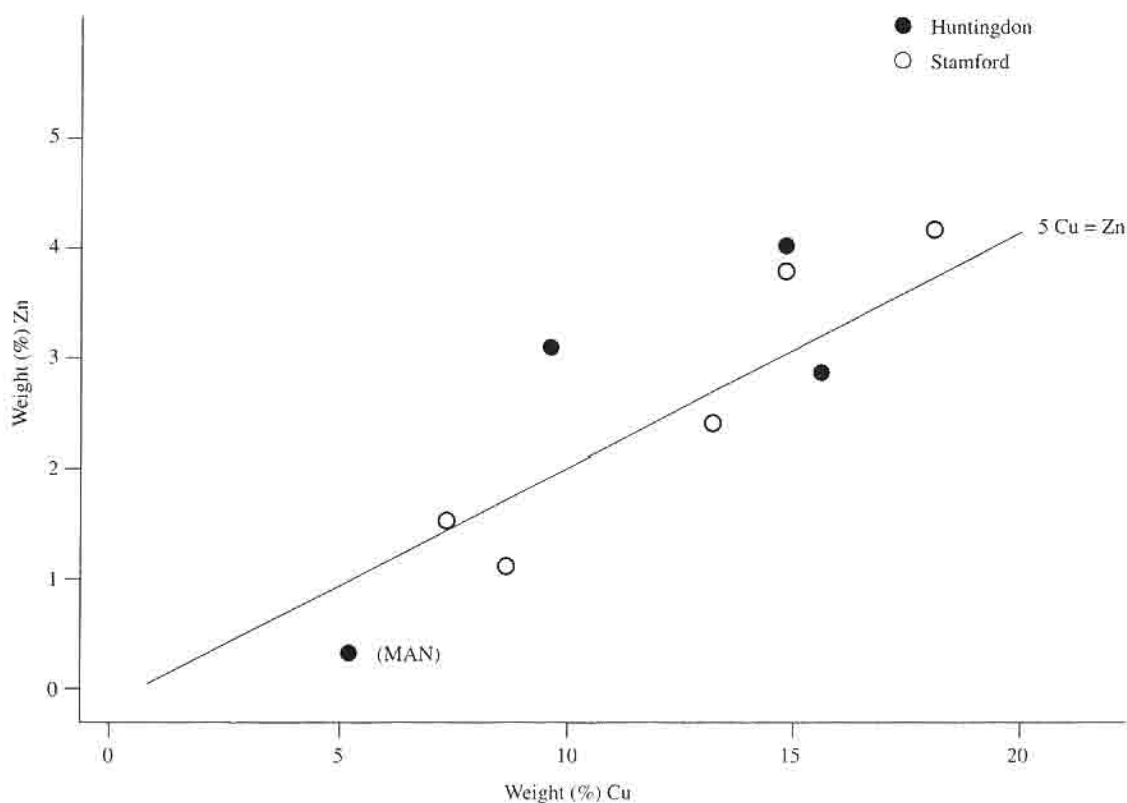


Fig. 4. Cnut, Quatrefoil type. Cu v. Zn content of coins struck from gouged reverse dies at Huntingdon and Stamford.

In view of the foregoing, one possible interpretation is that gouges were made in dies used to strike coin not from bullion that had been debased but had, in the interests of urgency, been exempted from assay and refining before being brought into use. This precaution would excuse abnormally debased output but would not necessarily in practice give rise to purity levels markedly dissimilar to the actual standard.

If debasement is shown, on further analysis, to have been a feature of coinage at the end of Æthelred II's reign and beginning of Cnut's, its link with weight manipulation during the course of a coin type will need to be explored. The substitution of alloy also, of course, affects the weight because of differences in specific gravity, but its overall effect is relatively small.

Position of gouges and use of symbols

In considering other circumstances that could have given rise to the practice of gouging, the position of the gouges deserves further attention. The temporal significance of the quarter in which the gouge appears has already been dismissed. Except for rare dies gouged across a limb of the reverse cross or in the legend, gouges are found, as Table 5 has shown, in all four quarters but mainly in Q2 and Q3. At Stamford, Cawelin has gouges in Q2-4 and Godwine in Q1-3. The remaining moneyers are at present known from gouges in only one or two of the quarters. Uniquely, Wulfnoth of Leicester has a gouge in both Q2 and Q3 of the same die.

One of the writers (Eaglen), based on a study of Huntingdon coins, suggested that the gouge was intended to erase a pre-existing symbol.³² Sufficient examples of ungouged coins have now come to light where the field is plain to discount this as an entire explanation. It does appear, however, that where symbols in the field do exist they are likely to be gouged out. This is clearly apparent with crosses which tend to be incompletely obliterated. In contrast, pellets are more easily erased and the evidence of their existence will be lost unless ungouged examples come to light. Perhaps exceptionally, one die of Thurcetel of Huntingdon, gouged in Q2, still flaunts a pellet in Q3. In theory, such erasures could have been made for cogent, if obscure administrative reasons or simply to cover a redundant symbol out of a sense of neatness on the part of the gouger.

Clearly, once a coin was in circulation, administrative control could only be maintained over what had happened during the minting and issuing process from the information provided on the coin itself. Fundamental, of course, was the identity of the moneyer responsible for the coin and the mint to which he was accredited. This was so vital to the system of control that it is extremely improbable the moneyer's responsibility for the minting process could have been ambiguously shifted by tampering with the die at the mint. The fact that all of Thurcetel's four known dies were gouged and that key moneyers, such as Godleof at Huntingdon and Godwine at Stamford, used both gouged and ungouged dies and were active after the period of gouging, is telling evidence that gouging did not refer to control of dies by other than the inscribed moneyer.

A distinction may, nevertheless, exist between the moneyer's exercise of his vested authority and the immediate source of that authority. Although coinage rights all sprang ultimately from the king, these rights would be farmed to boroughs but could also be granted by franchise to eminent subjects. The franchise was still attached to a place because the inscription on coins for control purposes was always moneyer A of (MO, ON) urban centre B. It has been seen, for example, that Wulfgar may have struck coins on behalf of the abbot of Peterborough. More importantly, he appears to have used a die engraved at Stamford with an annulet on the reverse when he was doing so. Indeed, it is logical that the added symbols which so exercised Parsons in 1917 were added to coins being used on behalf of a franchisee. What follows is offered as a hypothesis to be tested by further research than is possible in the compass of this paper.

When a moneyer was engaged conventionally through the farm as a royal moneyer, no special symbols would be needed on his dies. Equally, when a moneyer was solely engaged to act on behalf of a franchisee, say an earl or an ecclesiastic, no special distinguishing marks would be necessary. If, however, he acted in a dual capacity, both on behalf of the farm and a franchisee, a

³² Eaglen, 'The Mint of Huntingdon', as in n. 17, p. 71.

distinguishing mark would be appropriate on dies used to strike coins on behalf of the latter, doubtless using the franchisee's own silver. This may be the position that Wulfgar had been in at Stamford.

As Parsons noted, the commonest symbols encountered are annulets, crosses and pellets. Apart from the possible abbatial significance of the annulet in Æthelred II's reign, its use in the reign of Edward the Confessor at York as the symbol of the archbishop has been mooted.³³ The cross would also, rationally, carry a religious connotation, possibly referring to dies used on behalf of a bishop.³⁴ On this premise, a pellet could represent the rights of a lay franchisee, such as an earl.

The point of this analysis is to suggest that the gouged dies represent the production of coins, possibly from unassayed bullion, under royal rather than franchisal authority. This situation could only have arisen under the pressure of an emergency, when all available moneyers and dies were mustered. This would have included dies prepared for franchisees. In consequence, where symbols referring to the franchise were found on the dies, they were erased. The gouging in such circumstances served a double purpose. Failure to do this correctly could account for the double gouging of the die used by Wulfnoth of Leicester. An ungouged reverse die duplicate would, however, be needed to test this premise.

The erasure of a cross on the reverse is most clearly seen on coins of Godleof at Huntingdon (dies C/e1, C/e2). The question thus arises why a cross, if emblematic of a bishop, should appear on a coin of Huntingdon at all. Domesday Book³⁵ records that a residence (*mansione*) at Huntingdon, belonging to the bishop of Lincoln with *sac* and *soc*, was demolished when a new castle was constructed by the order of William I in 1068.³⁶ Reference to the bishop of Lincoln is, in fact, a compiler's error because the see was not transferred there from Dorchester-on-Thames before 1072.³⁷ So the reference should properly have been to the bishop of Dorchester's residence. Since, between 1006 and 1049, abbots from Ramsey had acceded to the see, their partiality to a residence at nearby Huntingdon would be understandable.³⁸ In Cnut's time, the diocese was the most extensive in England, stretching from the Thames to the Humber.³⁹ Bishop Remigius would probably have required little encouragement from the king to move his seat from Dorchester, at the southern extremity, to Lincoln, as the most important urban centre in the diocese. As there was no mint at Dorchester, it is conceivable that the bishop could have traditionally enjoyed minting rights at Lincoln and this would account for coins with crosses in the field issued from there. It could also account for dies engraved at Lincoln and London, bearing a reverse cross, being supplied to Huntingdon for the bishop's benefit when residing there. On the thesis put forward, Godleof at Huntingdon would have acted as both royal and bishop's moneyer, his dies being distinguished accordingly. The bishop's dies were then pressed into royal service under the circumstances that spawned the gouges.

The role of Stamford

It appears manifest that gouging originated at Stamford. It also appears that the practice was limited – with the exception of the Rochester die – to mints close enough and dependent enough to be influenced by the Stamford practice. It is here that the Rochester die assumes importance. In 1986, Blackburn and Lyon speculated that Ælfwold could have been the Thetford moneyer of the same name 'although what might have occasioned his obtaining local [i.e. Stamford] dies and travelling

³³ See Parsons, 'Symbols and Double Names' as in n. 1, p. 20, the doubts being shared by C.E. Blunt, 'The President's Address, Ecclesiastical Coinage in England', *NC* 20 (1960), i–xviii, at p. xvii.

³⁴ On the spread of ecclesiastical franchises by the reign of Cnut, see Kenneth Jonsson, 'The Coinage of Cnut', *The Reign of Cnut, King of England, Denmark and Norway*, edited by Alexander A. Rumble (Leicester, 1994), pp. 193–230, at p. 194 and Blunt, 'Ecclesiastical Coinage in England', as in n. 33, p. xvii.

³⁵ *Domesday Book*, fol. 203a.

³⁶ Orderic Vitalis, *The Ecclesiastical History*, edited by M. Chibnall (Oxford, 1969), II, p. 218.

³⁷ *Handbook of British Chronology*, edited by E.B. Fryde, D.E. Greenway, S. Porter and I. Roy, 3rd edition (London, 1986), p. 255.

³⁸ See Frank Barlow, *The English Church, 1000–1066* (London, 1963), pp. 102–3.

³⁹ David Hill, *An Atlas of Anglo-Saxon England* (Oxford, 1981), pp. 158, 161.

to Kent to strike coins is hard to imagine'. They also wondered if the coin could represent the activity of a short-lived mint in the Stamford region.⁴⁰ Lyon now believes that Ælfwold was indeed a Kentishman, perhaps accompanying the bishop of Rochester on a visit to the Stamford area where he was required, for some reason, to mint coins and accordingly issued with locally cut dies.⁴¹ If so, and it is difficult to suggest a more plausible explanation for his dies, he does seem to have become involved in whatever needs prompted the introduction of gouging in the Quatrefoil type.

This kindles speculation whether other moneyers may have brought their dies to Stamford, where they were gouged to serve the same needs. This is consistent with the gouged dies coming to light and their source. Three categories are involved, those of moneyers from neighbouring mints, those made up of or completed from disparate sources, as described above, and those engraved (and possibly immediately gouged) by the die-cutters of Stamford itself. The concentration of gouging at one centre is certainly more plausible than the alternative that the practice spread somewhat haphazardly and tentatively to neighbouring mints. Moreover, the factor of Stamford dies being used virtually exclusively by Stamford itself and the other mints involved in gouging has already been noted.

Defacement as a mark of de-commissioning?

As previously mentioned, Archibald perceives defacement of obverse dies in Stephen's reign as an official means to disqualify them from further use and has suggested the reason why, exceptionally, they were re-commissioned. Although the gouges in the Quatrefoil issue are a defacement of reverse dies, it is legitimate to ask whether they could also have been a mark of de-commissioning. The evidence does not support such a construction. First, the gouges are too discreet to suggest they served such a purpose. Secondly, the practice was very limited in its area of operation yet was widely employed at Stamford. Thirdly, at Huntingdon all the known reverse dies of the relatively inactive moneyer Thurcetel were gouged. These circumstances do not fit a scenario in which cancelled dies had to be brought back into use because they could not readily be replaced in the conventional way. Most significantly of all, at this period Stamford had its own die-cutting capability, rendering the re-commissioning of cancelled dies superfluous.

The geld of 1018

The evidence postulates that gouging arose when there was pressure for quantities of coin to be minted urgently. The opening of a die-cutting centre at Stamford was doubtless a response to this need. It appears that gouging arose after – probably shortly after – the centre began to operate. A more lenient attitude towards the assay may have been permitted to help Stamford to meet its required output and moneyers drafted in from elsewhere to assist, even drawing on those in retirement, such as Sæwine of Huntingdon. If, indeed, it is correct that gouging was carried out at Stamford alone, the query naturally arises whether the practice was to meet a purely local need. The sketchy sources for Cnut's reign yield no such explanation. Thus, if the practice at Stamford was in response to a more general demand and not for some other cryptic administrative reason, it could be explicable as a local precaution to forestall problems should the purity of the unassayed output later be questioned.

In the absence of discovering local grounds for the practice it is inviting to link gouging with the huge geld levied by Cnut in 1018, when London was required to find £10,500 and the rest of the country £72,000.⁴² The potential stumbling block in making this connection is chronological. Most of the coins struck from the gouged dies weigh below 1.00 g and were thus light/late in the

⁴⁰ Blackburn & Lyon, 'Regional die-production', as in n. 16, p. 238, n. 16.

⁴¹ Private correspondence. For a possible parallel, in the Last Small Cross issue of Æthelred II involving the moneyer Wensige of Wilton, see Stewart Lyon, 'Die-cutting Styles in the Last Small Cross Issue of c.1009–1017 and some Problematic East Anglian Dies and Die-links', *BNJ* 68 (1998), 21–41, at pp. 37–8.

⁴² *The Anglo-Saxon Chronicle*, translated and edited by G.N. Garmonsway, 2nd edition (London, 1955), p. 154.

issue. Blackburn and Lyon identified five diminishing weight standards in the Quatrefoil type at Lincoln: c. 1.40, 1.30, 1.20, 1.10 and 0.95 g. The lowest standard at Chester, London, Winchester and York they estimated as slightly higher at 1.00g. Generalising from their findings, they concluded that about thirty per cent of the output at the five mints was struck to the first three standards (1.40–1.20 g), forty per cent to the fourth standard (1.10/1.05 g) and thirty per cent to the fifth (1.10/0.95 g).⁴³ Metcalf has estimated that forty-seven million coins were struck in the Quatrefoil issue.⁴⁴ Thus, if (1) Metcalf's figures are accepted, (2) the geld was correctly recorded, and (3) met in coin, the geld would account for just under twenty-two million coins, or forty-seven per cent of the estimated output for the type. Even if Dolley's original thought in dating the Quatrefoil issue from 1017 rather than 1018 is correct⁴⁵ and the date when the issue ended is left flexible, any link between the geld and gouged dies has to reconcile the large output for the geld early in the issue with the apparently light/late character of coins struck from the gouged dies.

Because Cnut came to the throne as the result of invasion, he would doubtless have wished to assert the legitimacy of his title (and gain the tax benefits of a *renovatio*) by issuing a coinage in his own name as quickly as possible. How quickly this could be achieved is demonstrated by the substantial coinage issued by Harold II after his accession in 1066. The coinage in circulation when Cnut came to power was possibly also depleted by the geld of £21,000 levied in 1014 and the intervening conflicts.⁴⁶ The early/heavy coins of the Quatrefoil issue would thus have been needed in large numbers to fuel the *renovatio* from early in 1017. The question then arises how large, in fact, were the heavy (1.40–1.20 g) and intermediate (1.10 g) issues compared with the 'late', light issue (1.00/0.95 g). The figures calculated by Blackburn and Lyon for the five mints, including Lincoln, are based on the successive sub-styles (early, middle, late). However, if the calculations are based on weight as the main criterion, the picture at Lincoln changes, as Table 8 shows. The percentages of Blackburn and Lyon and of Eaglen and Grayburn in the Table are derived from 223 coins in the systematic collection at Stockholm (Hildebrand) and in the Copenhagen sylloge; those of Mossop from the weights of 464 coins recorded in *The Lincoln Mint*.⁴⁷ The latter figures are valuable not merely for the size of sample but also as a modest antidote to possible bias in the Scandinavian hoards.

TABLE 8: Cnut, Quatrefoil type. Estimated percentage output at Lincoln.

	Blackburn and Lyon	Per cent (%) Eaglen and Grayburn	Mossop
Early	30	19	17
Middle	40	30	34
Late	30	51	49

How much coin was available to meet the geld of 1018 is unknown, but intense mint activity must have been necessary in response to the unprecedented sum. It is also not known precisely when the geld was imposed or how long it was before it was met. In the *Anglo-Saxon Chronicle* it appears at the beginning of a scantily recorded year. It may have been placed as the first item because it was the most remarkable rather than the earliest event in that year. It would also have taken time to assemble the silver needed to meet the demand and convert it into coin. Within such a timetable, striking coins at the lowest weight to meet the geld becomes chronologically more plausible.

⁴³ Blackburn & Lyon, 'Regional die-production', as in n. 16, p. 254.

⁴⁴ Metcalf, 'Continuity and Change', as in n. 22, p. 63.

⁴⁵ See Blackburn & Lyon, 'Regional die-production', as in n. 16, p. 257 and n. 36.

⁴⁶ *The Anglo-Saxon Chronicle*, as in n. 42, p. 145.

⁴⁷ H.R. Mossop, *The Lincoln Mint c.890–1279* (Newcastle-upon-Tyne, 1970).

Mossop's figures show that the non-Scandinavian (and substantially English) element in his catalogue amounts to approximately twenty-five per cent. Possibly reflecting the exaggerated impact of the Scandinavian hoards, Appendix I lists eighty-nine coins of which fifty are from Scandinavian hoards and thirty-nine from other sources, including twenty-six from the 'Cnut' hoard of c.1993, assembled in the Cambridge area.⁴⁸ The geld would, accordingly, have led to slack demand for new coin and a scarcity of bullion in the latter stages of the Quatrefoil issue. This could account for the sprinkling of coins recorded below the 1.00/0.95 g standard.⁴⁹ It could also have prompted a *renovatio* well before the end of the hypothetical sexennial cycle proposed by Dolley.⁵⁰

Lincoln has been used in Table 8 to test the relationship between output and timings because it is a major mint for which an impressive number of known coins has been published. The percentages suggest that Lincoln, as a major mint, had already been heavily committed to the *renovatio*, before being called upon to contribute to the geld. If similar weight standards are applied to the Stamford coins in the systematic collection in Stockholm and the Copenhagen sylloge, although the sample is small, the results are dramatically different, as Table 9 shows.

TABLE 9: Cnut, Quatrefoil type. Estimated percentage output at Stamford.

	Weight (g) standard	Number of coins	%
Early	1.40/1.20	4	15
Middle	± 1.10	6	
Late	1.00-0.95>	58	85

Unless Stamford was contemporaneously operating at a markedly different standard from that of Lincoln,⁵¹ on these figures there is no hindrance in associating Stamford output using gouged dies with the geld of 1018. Turning to Huntingdon, Table 10 reveals that the pattern is different again.⁵² Based on known coins, the weight standards appear to be 1.45 g and 1.26 g (early), 1.06 g (middle) and 0.88 g (late). Apart from two coins of the moneyer Man(wine) at the middle standard, the remaining twelve gouged coins of Huntingdon in Appendix I average 0.92 g.

TABLE 10: Cnut, Quatrefoil type. Estimated percentage output 'at' Huntingdon.

	Weight (g) standard	Number of coins	%
Early	1.45/1.26	13	30
Middle	± 1.06	34	50
Late	± 0.88>	11	20

⁴⁸ Eaglen, 'The Mint of Huntingdon', as in n. 17, p. 63.

⁴⁹ See, for example, Petersson, 'Coins, Weights, Late Anglo-Saxon Pennies and Mints', as in n. 23, Table I, p. 347.

⁵⁰ See n. 45 above.

⁵¹ For possible earlier evidence of this, see Stewart Lyon, 'Die-cutting Styles in the *Last Small Cross* Issue', as in n. 41, at pp. 30, 32.

⁵² The figures are taken from Eaglen, 'The Mint of Huntingdon', as in n. 17, p. 66.

In contrast with Stamford, the figures suggest that Huntingdon was active at the beginning of the Quatrefoil issue but less so by the period of gouging. This gives credence to Huntingdon being revitalised to lend a hand at Stamford in meeting the geld.⁵³

Conclusions

The writers embarked upon this study with the intention of describing what they had found, in the hope that this would lead eventually to decoding the meaning of the gouged dies. In the event, there appears to be reputable support for the following propositions:

- (1) gouged reverses were introduced at Stamford in the Last Small Cross issue of Æthelred II;
- (2) their use was reintroduced at Stamford in the Quatrefoil issue to indicate coins struck in haste without the silver being assayed and purified before alloying, or for some other so far undetected administrative reason;
- (3) the need for haste may have been occasioned by the geld of 1018;
- (4) the die-cutting centre at Stamford was set up to respond to this need;
- (5) moneyers from Bedford, Cambridge, Huntingdon, Leicester, Northampton and Rochester participated in meeting the demand (as is evidenced by their gouged reverses);
- (6) these moneyers probably deployed their dies at Stamford, where they were gouged for the same reason as were those of their Stamford colleagues;
- (7) their dies were either brought to Stamford or provided from other sources including dies prepared for them by Stamford engraver(s); and
- (8) gouging was not an indicator that coins were being intentionally struck below the prescribed weight or purity standard.

If the activity at Stamford described in this study occurred after the geld of 1018 had been met, this would chime harmoniously with a dearth of silver giving rise to lightweight and debased coins, but not with the apparent need for haste.

⁵³ For similar conclusions linking the Quatrefoil issue to the geld of 1018, see D.M. Metcalf, 'Can we believe the very large figure of £72,000 for the geld levied by Cnut in 1018?', *Studies in Late Anglo-Saxon Coinage* as in n. 23, pp. 169–76. In *An Atlas of Anglo-Saxon and Norman Coin Finds, 973–1086* (London, 1998), Metcalf, at p. 135, appears to have become less convinced by his earlier arguments. For an historian's perspective, see M.K. Lawson, *Cnut, the Danes in England in the Early Eleventh Century* (London, 1993), pp. 196–202.

<i>Mint</i> <i>Moneyer</i>	<i>Reverse</i> <i>gouge</i>		<i>O.</i> <i>die</i>	<i>Style</i>	<i>R.</i> <i>die</i>	<i>Style</i>		<i>Wt. (g)</i>	<i>Identity of coin</i>	<i>Comment</i>
Bedford										
Leofsige	Q1	c	A	Anomalous (Bedford ?)	a	Bedford (London ?)	(f)	1.19	Hild. 64	(The Bedford coins are the heaviest recorded from gouged dies).
	"	"	"	"	"	"	"	1.09	SCBI South Eastern Museums 1037	
	Q1	c	"	"	b	Bedford (London ?)	(f)	1.16*	Hild. 1286	Attributed by Hildebrand to Lewes. Reads LIOFN; shared O. with Leofsige.
Leofing (?)	–	–	"	"	a	Bedford (London ?)	(f)	1.09*	Hild. 63	
Cambridge										
Ornst	–	–	A	London Cl	a ₁	London	(f)	0.86*	Hild. 1061	Gouge intersects dexter limb of cross.
	Q1/3	c	"	" "	a ₂	"	"	0.93	SCBI Copenhagen 1098	
Wulfsige	–	–	A	Thetford C	a ₁	Thetford (?)	(f)	0.90	SCBI Copenhagen 1116	Narrow gouge
	"	"	"	" "	"	"	"	0.93	Hild. 1072	
	Q1	o	B	Thetford C	a ₂	"	"	0.93	SCBI Copenhagen 1115	
Huntingdon	The dies are as designated in Eaglen, 'The Mint of Huntingdon', <i>BNJ</i> 69 (1999), 111–19, where each die combinations is illustrated (Plates 6–8)									
Godleof	Q4	r	A2	London Cl	b	London	(f)	0.89	Hild. 1249 var.	O. A2 has four pellets behind bust. Five coins are known without pellets (A1), struck with a different R. in weight range 1.02–0.89g.
	"	"	"	" "	"	"	"	0.89	Grayburn collection*	
	–	–	C	Lincoln l	e1	Lincoln	(s)	0.90	SHM 16181A, B–1003	Small cross in Q4. Chipped.
	"	"	"	" "	"	"	"	[0.77]	Bergen	
	Q4	c	"	" "	e2	"	"	0.91†	Eaglen collection (H107)*	Gouge partly obliterating cross. See Fig. 2F, enlargement.
	"	"	"	" "	"	"	"	0.88	Hild. 1242	
	"	"	D	London Cl	"	"	"	0.91	Grayburn collection*	Sceptre behind bust.
Man(wine)	–	–	A	Bedford	a1	Bedford (?)	(s)	1.18	SHM 14091–431	
	"	"	B	London Al	"	"	"	1.00	Bergen	Gouged in legend.
	(Q3)	o	"	" "	a2	"	"	1.08 ^{to}	Eaglen collection*	
	"	"	"	" "	"	"	"	1.03	Grayburn collection*	
Sæwine	Q2	r	A	London Cl	a	Lincoln ?	(s)	0.85	SCBI Copenhagen 1288	Gouge partly obliterating cross (or dagger – shaped) symbol.
Thurcetel	Q3	r	A	Stamford B	a	London	(f)	0.95	Oslo	
	"	"	"	" "	"	"	"	0.93	Lyon collection*	
	Q2	c	"	" "	b	London	(f)	0.79	Trondheim	Pellet in Q3.

(Continued)

	Q2 Q3	c r	B C	London Cl London Cl	c e	London London
	"	"	"	" "	"	"
Leicester Wulfnoth	Q2 Q3	r c }	A	Winchester l	a	Stamford
Northampton Leofwine	Q4 Q3	r c?	A B	London Cl Stamford A?	a c	London Stamford
Rochester Ælfwold	Q2	r	A	Stamford A	a	Stamford
Stamford Ælfwig	—	—	A	Stamford B	a1	Stamford
	"	"	"	" "	"	"
	"	"	B	Stamford B	"	"
						1
	Q4?	r	A	Stamford B	a2	"
	Q3	r	C	Stamford A	c	Stamford
	"	"	"	" "	"	"
	Q3?	r	D	Stamford B	e	Stamford
Brand	Q3?	o	A	Stamford B	a	Stamford
Brunstan	—	—	A	Lincoln l	a1	Lincoln
	Q2/4	r	"	" "	a2	"
Cawelin	Q2	c	A	Stamford B	a	Stamford
	"	"	"	" "	"	"
	Q4	c	"	" "	b	Stamford
	Q2	o	B	Stamford B	c	Stamford

APPENDIX I: *Continued*

(f)	0.93	Grayburn collection*	
(f)	0.89 ^{to}	Grayburn collection*	Pellet or vestige of symbol in Q3.
"	0.88 [†]	Eaglen collection (H098)*	See Fig. 2, enlargement.
(f)	0.81	SCBI Latvia 95	Gouged in Q2 + 3.
(f)	0.96	SCBI Copenhagen 1203	Gouged horizontally.
(?)	?	Glazebrook collection	Purportedly with cross before bust and R. reading +LE : FPINE HO HAM.
(f)	0.84*	Hild. 3070	
(f)	0.96	SCBI Lincolnshire Collections 1229	
"	0.96	Hild. 3231	
"	0.94	SCBI Copenhagen 3506	Described in SCBI as R. die duplicate of 3505, but doubtfully so
"	0.89	SCBI Copenhagen 3505	Small gouge vertically below sinister limb of cross?
(f)	0.73	Tallinn	Traces of erased symbol beneath gouge?
"	0.65*	Grayburn collection*	
(f)	0.89	SCBI Copenhagen 3507	
(f)	0.85	SCBI Copenhagen 3509	Small gouge diagonally?
(s)	0.97*	BM (1896)	
"	0.93	Arnot 202*	Gouged vertically across sinister limb of cross.
(f)	0.96	SCBI Lincolnshire Collections 1238	
"	0.94 ^{to}	A.H. Baldwin	
(f)	0.96 [†] *	Grayburn collection*	
(f)	0.93	Oslo	Lozenge-shaped gouge.

	"	"	"	" "	"	"	"	0.89
	-	-	"	" "	d	Stamford	(f)	0.98
	(Q4)	o	C	Lincoln I	e	Lincoln	(s)	0.92
	"	"	"	" "	"	"	"	0.90
	Q3	r	D	Stamford A	g	Stamford	(f)	0.84
	"	"	"	" "	"	"	"	0.81
Godleof	Q2	c	A	Stamford B	a	Stamford	(f)	0.84
Godwine	Q2	c	A	Stamford B	a	Stamford	(f)	0.96
	"	"	"	" "	"	"	"	0.91*
	"	"	"	" "	"	"	"	[0.62]
	Q1	o	B	Stamford B	c	Stamford	(f)	0.91*
	Q3	c	C	Stamford B	e	Stamford	(f)	[0.82]
	Q3	c	D	Anomalous (Stamford A var.)	g	Stamford?	(f)	0.88
	Q3	r	E	Stamford A	i	Stamford	(f)	0.88*
	Q1	c	"	" "	j	Stamford	(f)	0.73*
	Q3	c	"	" "	k	Stamford	(f)	0.67*
	Q3	c	F	Stamford A	l	Stamford	(f)	0.86
	"	"	"	" "	"	"	"	0.80
	Q3	o	G	Stamford A	n	Stamford	(f)	0.76
Leofric	Q3	r	A	Stamford A	a	Stamford	(f)	0.83*
	Q3	c	B	Stamford B	c	Stamford	(f)	0.77*
	"	"	"	" "	"	"	"	0.72
Leofsige	Q1?	?	A	Stamford A?	a	Stamford?	(?)	?
Leofwine	Q2	c	A	Stamford B	a	Stamford	(f)	0.78
Morulf	Q1	o	A	Stamford A	a	Stamford	(f)	0.96
	"	"	"	" "	"	"	"	0.92
	Q2	c	"	" "	b	Stamford	(f)	0.93*
	"	"	"	" "	"	"	"	[0.90]
	"	"	"	" "	"	"	"	0.82
	Q2	c	B	Stamford B	c	Stamford	(f)	0.98 ^{†0}
	"	"	"	" "	"	"	"	0.97 ^{†*}
	"	"	"	" "	"	"	"	0.96
	"	"	"	" "	"	"	"	0.90
	Q3?	o	"	" "	d	Stamford	(f)	0.98

<i>SCBI</i> Copenhagen 3516	
<i>SCBI</i> Copenhagen 3514	R. similar to b above.
<i>SCBI</i> Ashmolean Museum 669	Gouge (or fault?) in legend.
Hild. 3241	
Hild. 3240	
St. Petersburg	
<i>SCBI</i> Lincolnshire Collections 1243	
Hild. 3282	
Hild. 3274	
Bergen	Broken, chipped.
Grayburn collection*	Asymmetrical gouge.
<i>SCBI</i> Finland 706	Chipped.
<i>SCBI</i> Copenhagen 3550	
Grayburn collection*	
Grayburn collection*	
Eaglen collection (ST06)*	See Fig. 2, 0. enlargement.
<i>SCBI</i> Copenhagen 3553	
Bispham collection*	
<i>SCBI</i> Copenhagen 3557	Assymetrical gouge.
Grayburn collection*	
Grayburn collection*	} Gouge appears struck up differently.
Myntgalliert auction 20 May 1995, 694*	
Glazebrook collection	
	No other details available.
<i>SCBI</i> Copenhagen 3612	R. reads +L·E·/OFS·/IGEO/STA
Grayburn collection*	No other details available.
St. Petersburg	Uneven gouge.
Grayburn collection*	
Myntgalliert auction 20 May 1995, 699*	Some verdigris.
Hild. 3325	
Grayburn collection*	Assymetrical gouge.
Eaglen collection (ST02)*	
Hild. 3327	
<i>SCBI</i> Finland 707	
Hild. 3326	Crudely executed gouge (or flaw?).
<i>SCBI</i> Copenhagen 3625	

APPENDIX I: *Continued*

Oswald	Q4	c	A	Stamford B	a	Stamford	(f)	0.95	SCBI Polish Museums 204	
	Q3	p	B	Stamford B	c	Stamford	(f)	0.88†*	A.H. Baldwin	See Fig. 2, enlargement.
	"	"	"	"	"	"	"	[0.53]	Bergen	Fragment.
	Q3	r	"	"	d	Stamford	(f)	0.72	St. Petersburg	
Swertbrand	—	—	A	Stamford B	a1	Stamford	(f)	0.98	SCBI Copenhagen 3654	
	Q4	p	B	Stamford B?	a2	"	"	0.93	SCBI Lincolnshire Collections 1255	
	—	—	c	Anomalous (Stamford A var?)	e1	Stamford?	(f)	0.90	SCBI Copenhagen 3653	
	Q4	c	"	"	e2	"	"	0.85	SCBI Copenhagen 3652	
Thurstan	Q2	c	A	Stamford A	a	Stamford	(f)	0.85	Hild. 3349	
	"	"	"	"	"	"	"	0.85	SCBI Finland 708	Later striking than previous coin.

Key: Q = heraldic quarter $\frac{1}{2}$
 c = capsule shaped gouge
 (f) = flattened quatrefoil
 o = 'other' shaped gouge

p = pellet shaped gouge
 r = rectangular gouge
 (s) = shaped quatrefoil

† = analysed for silver content, see Table 7
 * = listed in Appendix IV and illustrated in Plate 1.
 ° = illustrated in Plate 2.
 • = ex 'Cnut' hoard (c.1993)

Addendum: Since completing this paper Bill Lean has drawn the author's attention to a coin in Stockholm from the Djuped hoard (1919), 0.95 g, which has a capsule shaped gouge in Q3. Since this coin is struck from the same reverse die as Copenhagen 3505 (see Stamford, Ælfric, dies Aa1/2) to query whether that coin displayed a gouge or not appears to be answered in the negative.

APPENDIX II: Cnut, Quatrefoil type. Coins excluded from Appendix I.

<i>Mint</i>	<i>Moneyer</i>	<i>Weight (g)</i>	<i>Reference</i>	<i>Comment</i>
Gloucester	Leofsige	1.16	Elmore Jones 308	Flaw, also seen on <i>SCBI</i> Copenhagen 1039 (1.11g) and Hild. 985 (1.05g). Gloucester style 0.
London	Liofwine	1.04	Hild. 2662	Crimped. No flaw.
Norwich	Æfic	1.07	R. Griffin	Flawed, rather than gouged on O? The 'silver' content of this coin was analysed by Dr. Northover as 97.33%.
Oxford	Wulfwig	1.16	Hild. 3055	Not gouged. Oxford style O. and shaped quatrefoil.
	Wulfwig	1.12	<i>SCBI</i> Copenhagen 3299	Same R. as Hild. 3055.
Stamford	Cawelin	1.00	R. Griffin	Flaw in Q4.
	Cawelin	0.99	<i>SCBI</i> Finland 704	Not gouged.

APPENDIX III: Æthelred II, Last Small Cross type. Gouged reverse dies of Stamford mint.

<i>Moneyer</i>	<i>Position of gouge (o/c)</i>	<i>Weight (g)</i>	<i>Identity of coin</i>
Æscman	6.30	1.05	Grayburn collection
Brunstan	5	1.05 ¹	<i>SCBI</i> Lincolnshire Collections 1192
		1.05 ¹	<i>SCBI</i> St. Petersburg 1397
Godaeg	10.30	1.14 ^{2,3}	<i>SCBI</i> St. Petersburg 1401
		[0.80] ^{2,3}	Bergen (two fragments)
		1.11 ^{2,3}	<i>SCBI</i> Lincolnshire Collections 1198
		0.93 ³	Bergen
Godleof	10	1.03	<i>SCBI</i> St. Petersburg 1405
	11	1.02	Lyon collection
Godwine	12.30	1.12 ⁴	Hild. 3514
		1.05 ⁴	<i>SCBI</i> Lincolnshire Collections 1213
		0.95 ⁴	Grayburn collection
		[0.42] ⁴	Bergen (fragment)

Notes: ¹ Same dies
² Same obverse die
³ Same reverse die
⁴ Same dies

APPENDIX IV: Identity of coins illustrated in Plate 1

- 1 Bedford, Leofsig. Hild. 1286 (where attributed to Lewes).
- 2 Bedford, Leofing (?). Hild. 63.
- 3 Cambridge, Ornst. Hild. 1061.
- 4 Rochester, Ælfwold. Hild. 3070.
- 5 Stamford, Ælfwig. Grayburn collection (0.65 g).¹
- 6 Stamford, Brunstan. BM (1896). Ex Montagu (0.97 g)
- 7 Stamford, Cawelin. Grayburn collection (0.96 g).¹
- 8 Stamford, Godwine. Hild. 3274.
- 9 Stamford, Godwine. Grayburn collection (0.91 g).¹
- 10 Stamford, Godwine. Grayburn collection (0.88 g).¹
- 11 Stamford, Godwine. Grayburn collection (0.73 g).¹
- 12 Stamford, Godwine. Eaglen collection (ST06), (0.67 g).¹
- 13 Stamford, Leofric. Grayburn collection (0.83 g).¹
- 14 Stamford, Leofric. Grayburn collection (0.77 g).¹
- 15 Stamford, Morulf. Grayburn collection (0.93 g).¹
- 16 Stamford, Morulf. Eaglen collection (ST02), (0.97 g).¹
- 17 Stamford, Oswald. A.H. Baldwin & Sons Ltd.

Note: ¹ Ex 'Cnut' hoard (c.1993).

APPENDIX V: Identity of Coins Listed in Table 7.

Those illustrated in Plate 2 are marked with an asterisk (*). For the remainder a published source for their illustration is cited.

Æthelred II, Last Small Cross type – Stamford

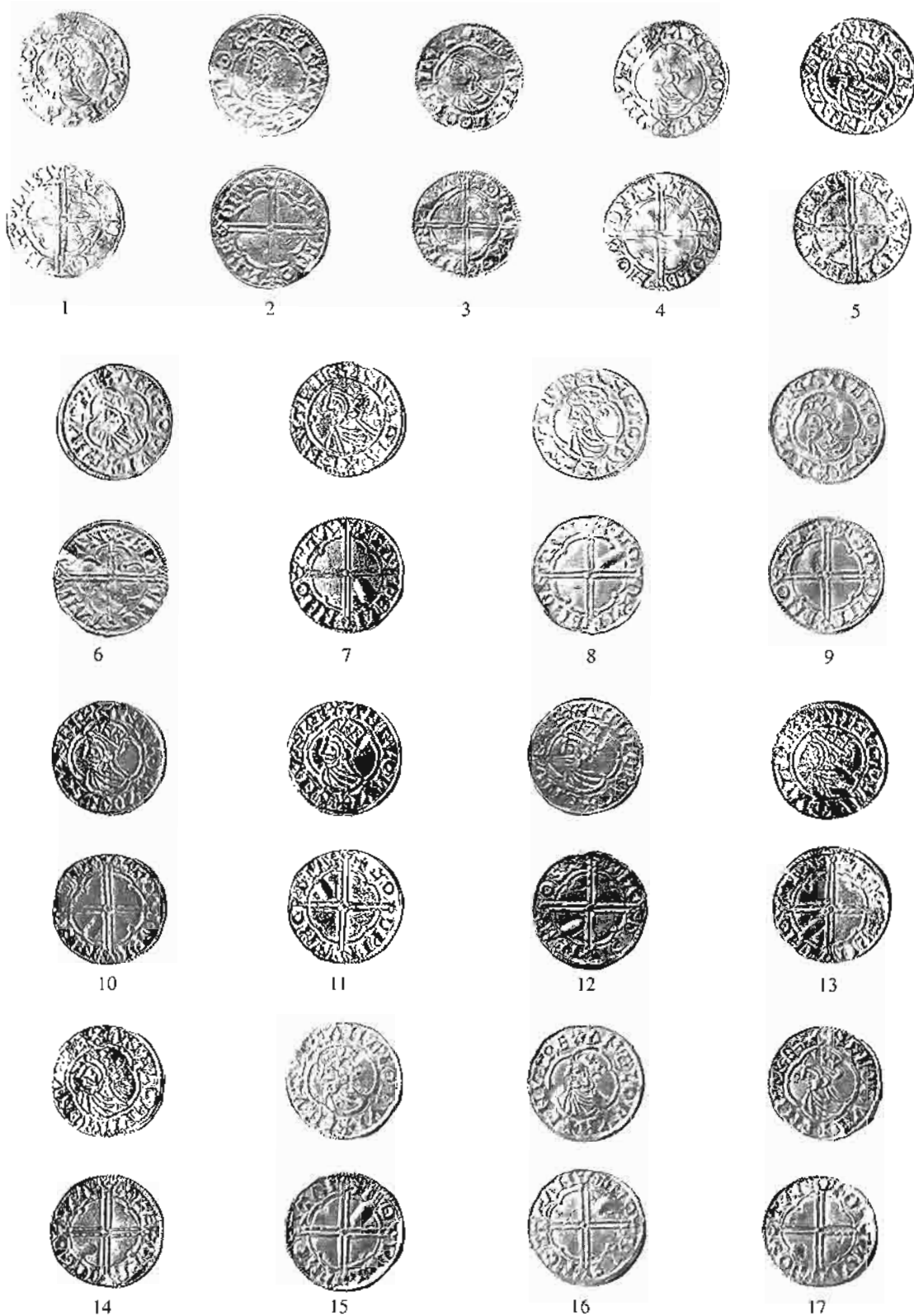
- * (1) Godleof. A.H. Baldwin & Sons Ltd.
- * (2) Swertgar. A.H. Baldwin & Sons Ltd. Ex Wheeler collection.
- * (3) Æscman. Grayburn collection. Ex 'Cnut' hoard (c. 1993).
- * (4) Godwine. Grayburn collection. Ex 'Cnut' hoard (c. 1993).
- (5) Godwine. *SCBI* Lincolnshire Collections 1211 (illustrated therein).

Cnut, Quatrefoil type – Huntingdon

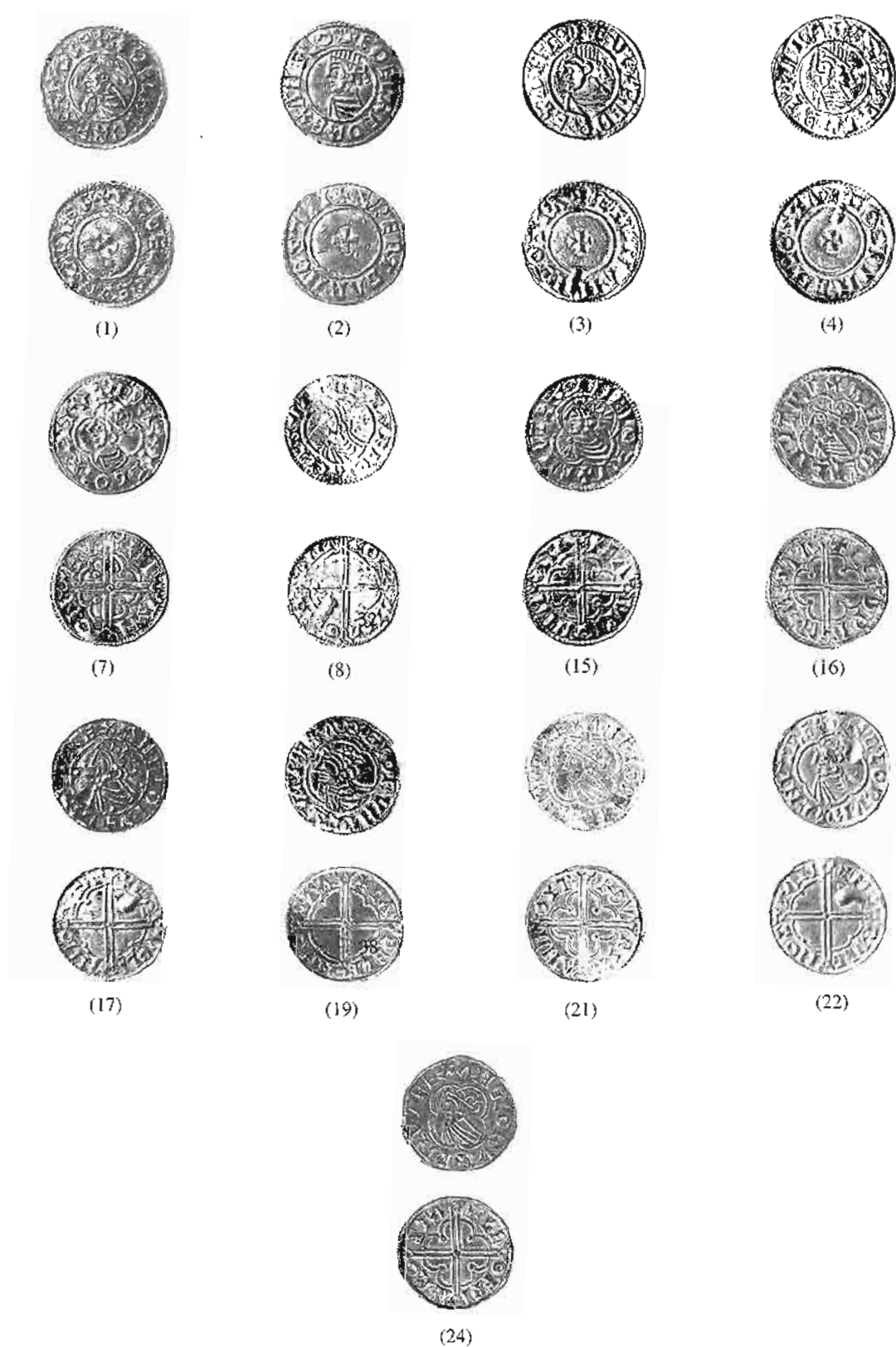
- (6) Eadnoth. Eaglen collection (H100). *BNJ* 69(1999), Plate 7, 144.
- * (7) Man(wine). Eaglen collection (H111). *BNJ* 69(1999), coin 175(2).
- * (8) Thurcetel. Grayburn collection. *BNJ* 69(1999), coin 186(1).
- (9) Godleof. Eaglen collection (H102). *BNJ* 69(1999), Plate 7, 165.
- (10) Godleof. Eaglen collection (H097). *BNJ* 69(1999), Plate 8, 167.
- (11) Godleof. Eaglen collection (H107). *BNJ* 69(1999), Plate 8, 169.
- (12) Thurcetel. Eaglen collection (H098). *BNJ* 69(1999), Plate 8, 186.
- (13) Eadnoth. Eaglen collection (H108). *BNJ* 69(1999), Plate 7, 162.

Cnut, Quatrefoil type – Stamford

- (14) Cawelin. National Museum of Wales. Ex Bryn Maelgwyn hoard (1979–80). Illustrated in George C. Boon, *Welsh Hoards, 1979–81* (Cardiff, 1986), pp. 1–35, Fig. 15, coin 191.
- * (15) Eadwine. Grayburn collection. Ex 'Cnut' hoard (c. 1993). Annulets in cusps.
- * (16) Godwine. Eaglen collection (ST04). Ex 'Cnut' hoard (c. 1993).
- * (17) Cawelin. A.H. Baldwin & Sons Ltd. Ex Crompton Roberts and Wheeler collections.
- (18) Cawelin. Grayburn collection. Ex 'Cnut' hoard (c. 1993). Illustrated, **Pl. 1, 7**.
- * (19) Cawelin. Eaglen collection (ST03). Ex 'Cnut' hoard (c. 1993).
- (20) Morulf. Eaglen collection (ST02). Ex 'Cnut' hoard (c. 1993). Illustrated, **Pl. 1, 16**.
- * (21) Thurstan. Eaglen collection (ST05). Ex 'Cnut' hoard (c. 1993).
- * (22) Morulf. Grayburn collection. Ex 'Cnut' hoard (c. 1993).
- (23) Oswald. A.H. Baldwin & Sons Ltd. Illustrated, **Pl. 1, 17**.
- * (24) Leofwine. Eaglen collection (ST01). Ex 'Cnut' hoard (c. 1993).



EAGLEN AND GRAYBURN: GOUGED REVERSE DIES (1)



THE VOLUME AND COMPOSITION OF THE ENGLISH SILVER CURRENCY, 1279–1351

MARTIN ALLEN

BETWEEN 1279 and 1351 the volume and composition of the English currency changed radically. The volume of the silver currency rose to reach unprecedented heights in the early fourteenth century and then fell sharply, and the dominance of the English sterling or penny was challenged by new denominations in silver and gold, and imports of foreign coins. Documentary evidence and hoards can be used to analyse these changes. Mint accounts provide an almost complete record of the output of the London and Canterbury mints between 1279 and 1351, and they also record the output of other royal mints from 1300.¹ A seminal article published by Nicholas Mayhew in 1974 combined the evidence of mint accounts and eleven hoards, to estimate the volume of the English silver currency in circulation in 1311, 1324 and 1351.² Mayhew based his estimates upon aggregates of the London and Canterbury mint outputs in 1302–10, 1311–24 and 1344–51, and the percentages of London and Canterbury coins of those periods in hoards. These calculations provided estimates of c.£1,100,000 in 1311 and 1324, and c.£500,000 in 1351.³ Mayhew warned that his figures were only intended to be a basis of comparison, indicating the relative size of the currency at different times, as the method of estimation had two major limitations. The first limitation was the exclusion of mints other than London and Canterbury from the calculations, although this can be overcome by additional calculations estimating the total output of all mints. Mayhew's second problem was the wastage of new coins from circulation during a mint output period, by export and other means, reducing the number of coins of the period in hoards, with a consequent overestimation of the volume of the currency. It is now possible to produce revised estimates of the size of the currency, including allowances for wastage and other factors which Mayhew was unable to take into account.

The author has compiled a corpus of 328 hoards from the British Isles containing English pence minted between 1279 and 1544, ninety-eight of which have been sufficiently well recorded to be used in calculations of mint output and money supply.⁴ Analysis of the hoards detected bias in the representation of the most recent coins in a few of the finds, but the English coins in hoards from all parts of the British Isles are generally homogeneous, if the most recent issues are excluded. In the following calculations biased data from a few of the hoards have been excluded, and all hoards deposited less than ten years after the end of production of the coins concerned have also been disregarded.⁵ For example, in Table 1 the seventy-three hoards used to calculate the aggregates of

Acknowledgements. I have greatly benefitted from the advice of Dr Mark Blackburn, Professor T.V. Buttrey, Dr Nicholas Mayhew, Jeffrey North and Dr Gary Oddie, who have read drafts of this note. Dr Oddie's assistance with the calculation and interpretation of statistics has been invaluable. Dr Barrie Cook has answered many enquiries with constant courtesy and helpfulness, freely providing unpublished hoard data.

¹ C.G. Crump and C. Johnson, 'Tables of bullion coined under Edward I, II, and III', *NC* 4 13 (1913), 200–45; C.E. Challis (ed.), *A New History of the Royal Mint* (Cambridge, 1992), pp. 675–80. The mint accounts do not record the outputs of the temporary royal mints active in the recoinage of 1279–81, and they exclude the ecclesiastical mints.

² N.J. Mayhew, 'Numismatic evidence and falling prices in the fourteenth century', *Economic History Review* 2nd ser. 27 (1974), 1–15, at pp. 5–8.

³ Mayhew, 'Numismatic evidence', (as in n. 2) p. 7; idem, 'Money and prices in England from Henry II to Edward III', *Agricultural History Review* 35 (1987), 121–32, at p. 125.

⁴ M.R. Allen, 'The Durham Mint: The Control, Organization, Profits and Output of an Ecclesiastical Mint' (unpublished PhD thesis, University of Durham, 1999), pp. 93–107, 215–93. The 98 finds suitable for analysis are those with adequate descriptions of at least 95 per cent of the coins found.

⁵ Biases have been detected and excluded in the Middridge, Renfrew and Amble hoards.

coins of Fox class 4, minted c.1282-c.1289,⁶ were all deposited no earlier than the beginning of class 9, c.1299. In the last column of Table 1 the total penny output has been calculated by assuming that the proportions of London and Canterbury pence in the aggregated hoards represent the proportions of English mint output produced in London and Canterbury in the corresponding accounting periods. London statistics have not been used in 1279-90, because the recorded outputs of the London mint in that period include some unspecified quantities of groats and farthings. London has also been omitted in 1310-19, as the London account of 1310-11 is missing. The totals of hoard pence exclude the Berwick-upon-Tweed mint, as its coins from locally-made dies do not conform to the Fox classification of the English coinage. The estimates of penny output in Table 1 may be used to estimate the total supply of English pence at the end of each of the output periods, by assuming that the hoard aggregates indicate the relative proportions of coins in circulation minted before and during the period; these calculations are summarised in Table 2.

TABLE 1. Estimates of English penny output, 1279-1351.

<i>Accounts</i>	<i>Penny output (a)</i>	<i>Coins</i>	<i>London and/or Canterbury hoard pence (b)</i>	<i>Hoard pence attributed to a mint (c)</i>	<i>Estimate of total penny output (a × c/b)</i>
Canterbury: 1.1.1280-25.11.1282	£83,966	Classes 1-3 (77 hoards)	530	5,317	1279-82: £842,353
Canterbury: 25.11.1282-15.7.1290	£136,251	Class 4 (73 hoards)	950	2,866	1282-90: £411,048
London: 15.7.1290-29.9.1299 +Canterbury: 15.7.1290-29.9.1296	£50,178	Classes 5-8 (65 hoards)	455	487	1290-9: £53,707
London: 29.9.1299-29.9.1310 + Canterbury: 1.11.1299-29.9.1310	£884,054	Classes 9 and 10 (50 hoards)	7,261	8,866	1299-1310: £1,079,469
Canterbury: 30.9.1310-30.9.1319	£131,550	Classes 11-14 (31 hoards)	574	1,550	1310-19: £355,231
London: 1.10.1319-29.9.1330 +Canterbury: 1.10.1319-29.9.1331	£49,406	Class 15 (29 hoards)	109	173	1319-31: £78,415
London: 20.1.1344-12.4.1350 +Canterbury: 30.9.1344-19.12.1346	£72,132	'Florin' coinage (23 hoards)	102	133	1344-51: £94,054

⁶ Comparison of a hoard aggregate of 947 Canterbury coins of classes 2-7 with the corresponding mint outputs of 1280-96 indicates that class 3 probably ended in 1282. H.B.E. Fox and S. Fox, 'Numismatic history of the reigns of Edward I, II, and III [part 3]', *BNJ* 8 (1911), 137-48, at pp. 139-42 placed the start of class 5 in the 1288-90 accounting period. M.M. Archibald, 'The Skegby, Notts., 1967 hoard', *BNJ* 40 (1971), 44-56, at p. 48 argues that comparison of mint outputs with numbers of coins of classes 4-8 in hoards supports this conclusion.

TABLE 2. Estimates of English pence in circulation, 1282-1351.

<i>Output period</i>	<i>Estimate of penny output (a)</i>	<i>Hoard pence (b)</i>	<i>Total hoard pence (c)</i>	<i>Estimate of pence in circulation (a × c/b)</i>
1279-82	£842,353			1282: £842,353
1282-90	£411,048	Class 4: 2,866	Classes 1-4: 7,854	1290: £1,126,438
1290-9	£53,707	Classes 5-8: 487	Classes 1-8: 8,032	1299: £885,780
1299-1310	£1,079,469	Classes 9 and 10: 8,878	Classes 1-10: 13,511	1310: £1,642,792
1310-19	£355,231	Classes 11-14: 1,552	Classes 1-14: 9,306	1319: £2,130,013
1319-31	£78,415	Class 15: 174	Classes 1-15: 3,994	1331: £1,799,940
1344-51	£94,054	'Florin' coinage: 133	Class 1 - 'Florin' coinage: 1,068	1351: £755,261

The estimates of pence in circulation, and the possible effect of wastage between the dates of estimation, can be tested by calculating the apparent volume of coins of classes 1-3 (1279-c.1282) in circulation at each date. In Table 3 the volumes of coins of classes 1-3 have been calculated from the estimates of total penny supply and the hoard data ending at each date. Annual compound rates of wastage have been calculated from the net changes in volume between dates, with stated errors based upon the assumption that the hoard data are random samples of the coins in circulation.⁷ Most of the changes in volume are decreases, as might be expected if the coins of 1279-c.1282 were being progressively lost from circulation, but the increase in volume and negative wastage rate between 1310 and 1319 are contrary to this trend. This difficulty may be more apparent than real, as the stated errors of the 1310-19 wastage rate indicate a range of possible rates from -3.47 per cent to +2.05 per cent. The wastage rates and the volumes they are based upon are only approximate estimates, which should be treated with caution, but it may be tentatively concluded that the annual wastage of the coins of classes 1-3 was generally between 1 per cent or less and about 4 per cent.⁸ There is good reason to believe that there were exceptionally high wastages of English silver coins by export in the 1290s, and in the 1330s and 1340s.⁹ The cumulative wastage of the coins of a mint output period of about a decade, during the period itself, may often have been c.5-20 per cent, although it may have varied widely between mint output periods.¹⁰ This would have had a proportionate effect on the estimates of pence in circulation, causing overestimation. The final estimates of English pence in Table 5 include a deduction of 5-10 per cent for wastage in the shortest period (1279-82), and 5-20 per cent in the other periods.

⁷ Dr Gary Oddie has calculated the wastage rates, and provided advice on the interpretation of the statistics in Table 3.

⁸ T.V. Buttrey, 'Calculating ancient coin production: facts and fantasies', *NC* 153 (1993), 335-51, at pp. 345-7 discusses the widespread use of an assumed constant wastage rate of 2 per cent per annum in analyses of ancient coinages, without supporting evidence.

⁹ M. Prestwich, 'Edward I's monetary policies and their consequences', *Economic History Review* 2nd ser. 22 (1969), 406-16, at p. 411; idem, 'Currency and the economy in early fourteenth century England', in N.J. Mayhew (ed.), *Edwardian Monetary Affairs (1279-1344): A Symposium held in Oxford, August 1976* (British Archaeological Reports 36, 1977), pp. 46-7; idem, 'Early fourteenth-century exchange rates', *Economic History Review* 2nd ser. 33 (1979), 470-82, at pp. 481-2; idem, 'The Crown and the currency. The circulation of money in late-thirteenth- and early fourteenth-century England', *NC* 142 (1982), 51-65, at pp. 53-4, 59-61; M. Mate, 'The role of gold coinage in the English economy, 1338-1400', *NC* 18 (1978), 126-41, at pp. 127-8. About £350,000 was exported to pay for war expenditure between 1294 and 1298. In the 1330s and 1340s large quantities of English silver coins were exported in exchange for foreign gold.

¹⁰ Wastage would have varied for the coins of each period, from a maximum for coins minted at the beginning of the period to a minimum for the latest coins.

TABLE 3. Wastage of English pence minted 1279-c.1282.

Date	Estimate of total penny supply (a)	Total hoard coins (b)	Hoard coins of classes 1-3 (c)	Volume of classes 1-3 (a × c/b)	Wastage per annum since last estimate
1282	£842,353			£842,353	
1290	£1,126,438	7,854	4,988	£715,390	2.02 ± 2.63%
1299	£885,780	8,032	4,783	£527,476	3.33 ± 2.47%
1310	£1,642,792	13,511	2,647	£321,847	4.39 ± 2.04%
1319	£2,130,013	9,306	1,498	£342,871	-0.71 ± 2.76%
1331	£1,799,940	3,994	695	£313,209	0.75 ± 2.19%
1351	£755,261	1,068	188	£132,949	4.19 ± 1.50%

The penny supply was supplemented by coins of other denominations and foreign coins, which must be taken into account. Groats made a contribution to the output of the London mint, probably restricted to the recoinage of 1279-81,¹¹ which may be tentatively estimated to have been c.£20,000-£50,000.¹² The groat's diminishing contribution to the currency in circulation after 1282 cannot be estimated, but it would not have had a significant effect on the total volume of the currency.¹³ The London output of halfpence and farthings is known for nearly all of the accounting periods of 1279-1351.¹⁴ They provided 7.4 per cent (by value) of the output of the London mint between 1 January 1280 and 29 September 1281, and four other mints open during the recoinage also minted halfpence and farthings, but the output of the Canterbury mint and the four remaining mints of the recoinage did not include them.¹⁵ Minting of fractional denominations was restricted to London after the end of the recoinage, constituting only 3.8 per cent of London output in 1285-1330, with some output in Berwick from c.1296 and in Reading from 1339.¹⁶ However, the London output of 1331-43 entirely consisted of fractions, followed by an exceptionally high output of them in 1344-51, and the total output of halfpence and farthings in 1331-51 (£72,327) is equivalent to 8-10 per cent of the adjusted estimate of English penny supply in 1351 in Table 5 (c.£600,000-£720,000). The supply of fractions from English mints was supplemented by coins of Ireland, Scotland, and the Continent. Three of the thirteen halfpence in the Broughton hoard (deposited c.1290) were Irish, and ten halfpence in the Middridge hoard (c.1311) included a Scottish coin and an imitation of an Irish halfpenny.¹⁷ The Gorefield hoard (c.1312)

¹¹ J.J. North, 'The Fox classification and recent refinements', in J.J. North *et al.*, *The J.J. North Collection: Edwardian English Silver Coins 1279-1351 with some Supplementary Examples* (SCBI 39, 1989), pp. 4-8 classifies the groats of Edward I, demonstrating their connections with the recoinage pence of classes 1-3.

¹² The author has studied 53 groats of Edward I from 28 obverse dies, which provide an estimate of 39 equivalent obverse dies for the denomination, using the method described by C.S.S. Lyon, 'Analysis of the material', in H.R. Mossop *et al.*, *The Lincoln Mint c.890-1279* (Newcastle upon Tyne, 1970), pp. 11-19, at pp. 16-17. The average output of the groat die is unknown, and it can only be very tentatively suggested that it was within the range indicated by outputs of penny dies. J.D. Brand, 'The Shrewsbury mint, 1249-50', in R.A.G. Carson (ed.), *Mints, Dies and Currency: Essays Dedicated to the Memory of Albert Baldwin* (London, 1971), pp. 129-50, at pp. 135, 139-50 calculated that obverse dies used at Shrewsbury in the Long Cross recoinage had an average output of c.46,500 pence. M. Mate, 'Coin dies under Edward I and II', *NC* 79 (1969), 207-18, at pp. 209-12 calculated that the average output of London and Canterbury dies was 39,031 in 1281-1307, and 28,187 in 1307-27, and that six other mints had averages from 21,750 to 34,606 in 1300. G.L.V. Tatler, 'The Bury coinage of Edward I with the name of Robert de Hadeleie', *BNJ* 68 (1998), 64-76, at p. 73 estimated that Bury St Edmunds obverse dies had an average output of 64,000 coins in 1280-7. If the 39 equivalent obverse dies estimated for the groat coinage had an average output between 20,000 and 50,000 coins, the total value of groats minted would have been c.£20,000-£50,000.

¹³ The Dover hoard, deposited c.1295, is the only English hoard that is known to have included Edward I groats (two coins): R.H.M. Dolley, 'The Dover hoard: the first English hoard with groats of Edward I', *BNJ* 28 (1955-7), 147-68.

¹⁴ The output of farthings in London before 1 January 1280 was not recorded in the accounts. The London accounts of 1 January 1280-18 May 1280 include £36,410 attributed to halfpence, apparently in error, as this denomination was introduced in August 1280.

¹⁵ Halfpence and farthings were minted in London, Bristol, Lincoln, Newcastle-upon-Tyne, and the York royal mint. They were not produced in Canterbury, Bury St Edmunds, Chester, Durham and the York archiepiscopal mint.

¹⁶ C.E. Blunt, 'The mint of Berwick-on-Tweed under Edward I, II, and III', *NC* 11 (1931), 28-52; J.J. North, 'The mint at Berwick upon Tweed c.1296-c.1344', in North *et al.*, *The J.J. North Collection: Edwardian English Silver Coins 1279-1351*, (as in n. 11), pp. 79-83; M. Allen and M.R. Vosper, 'An Edward III class 15d penny of Reading', *BNJ* 69 (1999), 214-15.

¹⁷ J.J. North, 'The Broughton hoard' *BNJ* 35 (1966), 120-7; *Coin Hoards* 2 (1976), pp. 115-17 (hoard 453: Middridge).

had seven Irish coins in a total of twenty-three halfpence.¹⁸ The large output of fractions in London from 1335 seems to have significantly increased the dominance of English halfpence in circulation. All of the twenty halfpence in the Derby hoard (c.1350), and 452 (ninety-five per cent) of the 474 halfpence in the Stanwix/Rickerby find (c.1352), were from English mints other than Berwick.¹⁹ The Berwick mint supplied forty-three of the fifty-five farthings in the Stanwix/Rickerby (Cumbria) hoard, providing a notable example of bias towards a relatively local mint, but eighteen farthings in the Broughton hoard and eight from Gorefield were exclusively English, without coins of Berwick. The total supply of halfpence and farthings was probably much less than ten per cent of the value of the penny supply between 1279 and 1331, but it may have increased to about ten per cent in 1351. In Table 5, the estimates of halfpence and farthings are five per cent of the penny estimates from 1282 to 1331, and ten per cent in 1351.

TABLE 4. Pence or sterlings in English hoards.

<i>Hoard</i>	<i>Deposited</i>	<i>English pence</i>	<i>Other sterlings</i>	<i>Total</i>
Skegby	c.1290	406 (90%)	44 (10%)	450
Broughton	c.1290	255 (85%)	46 (15%)	301
Dover	c.1295	56 (9%)	570 (91%)	626
Ickfield	c.1295	464 (87%)	67 (13%)	531
Newminster	c.1305	426 (88%)	60 (12%)	486
Middridge	c.1311	2,612 (85%)	458 (15%)	3,070
Whittonstall	c.1311	1,070 (89%)	135 (11%)	1,205
Gorefield	c.1312	895 (84%)	167 (16%)	1,062
Boyton	c.1321	3,867 (93%)	280 (7%)	4,147
Amble	c.1325	927 (92%)	81 (8%)	1,008
Bootham	c.1325	830 (91%)	78 (9%)	908
Scotton	c.1325	304 (95%)	15 (5%)	319
West Rudham	c.1330	366 (93%)	27 (7%)	393
Derby	c.1350	567 (91%)	53 (9%)	620
Stanwix/Rickerby	c.1352	1,573 (93%)	118 (7%)	1,691

Table 4 summarises the sterlings in English hoards deposited between 1279 and c.1352, including all adequately recorded hoards with at least 100 sterlings.²⁰ The totals of 'other sterlings' include coins of Berwick, Scottish and Irish coins, and foreign sterlings. The Dover hoard is exceptional, as it predominantly consisted of foreign currency, probably imported at Dover.²¹ The other hoards contain between ten and sixteen per cent of 'other sterlings' until c.1312, and between five and nine per cent thereafter. Some of the hoards may underrepresent foreign sterlings in favour of better English coins,²² but the consistency of the data in the Table suggests that the hoards are relatively reliable indicators of the sterlings in circulation. An allowance of ten to fifteen per cent can be added to the estimates of penny supply in 1290 and 1310, and five to ten per

¹⁸ NC 159 (1999), pp. 350-1 (hoard 50).

¹⁹ L.A. Lawrence, 'A hoard of English and foreign sterlings found at Derby' NC⁵ 8 (1928), 47-60; pers. comm. Dr Barrie Cook (Stanwix/Rickerby). The statistics from the Stanwix/Rickerby hoard do not include twenty-nine fragments of English halfpence.

²⁰ Archibald, 'The Skegby, Notts. 1967 hoard' (as in n. 6); North, 'The Broughton hoard' (as in n. 17); Dolley, 'The Dover hoard' (as in n. 13); G.C. Brooke, 'Pennies, temp. Edward I, found at Newminster Abbey, 1925' NC⁵ 7 (1927), 277-9; *Coin Hoards* 2 (1976), pp. 115-17 (Middridge); R.H.M. Dolley and G.L.V. Tatler, 'The 1958 Whittonstall treasure trove' *Archaeologia Aeliana* 4th ser. 41 (1963), 65-83; NC 159 (1999), pp. 350-1 (Gorefield); R.H.M. Dolley, 'The 1953 Bootham treasure trove' *BNJ* 27 (1952-4), 281-93; D. Allen, 'The Boyton find of coins of Edward I and II' NC⁵ 16 (1936), 115-55; G.C. Brooke, 'A find of Edward pennies [Scotton]' NC⁵ 4 (1924), 325-6; NC 156 (1996), pp. 293-4 (hoard 135: West Rudham); Lawrence, 'A hoard of English and foreign sterlings found at Derby' (as in n. 19); pers. comm. Dr Barrie Cook (Ickfield, Amble and Stanwix/Rickerby).

²¹ Dolley, 'The Dover hoard' (as in n. 13), pp. 148-9, 154.

²² Archibald, 'The Skegby, Notts., 1967 hoard' (as in n. 6), pp. 49-50 argues that foreign imitations of English sterlings may have been deliberately excluded from the Skegby hoard, deposited c.1290, as they occur in other contemporary finds. N.J. Mayhew, *Sterling Imitations of Edwardian Type* (RNS Special Pub. 14, 1983), pp. 26-8 suggests that the particularly debased imitative sterlings of the 1330s and 1340s (Lushebourmes) were often excluded from hoards.

cent in 1319, 1331 and 1351. Foreign coins can be disregarded in 1282, as they had been temporarily removed from circulation by the recoinage of 1279-81. The estimate of the currency in 1299 must include a separate estimate for foreign imitative sterlings (pollards and crockards), in addition to a further ten to fifteen per cent for Berwick, Scottish and Irish coins.²³ The quantity of sterling imitations imported into England in the late 1290s was exceptional, requiring a recoinage in 1300.²⁴ Mayhew suggested that the size of the English currency at the start of the recoinage may have been £900,000, including £200,000 in pollards and crockards,²⁵ but both of these estimates are too low. The total output of the London and Canterbury mints was £130,976 in 1299-1300 and £52,816 in 1300-1, declining to only £10,226 in 1301-2 and £9,640 in 1302-3, and deduction of a normal non-recoinage output of c.£10,000 per annum from the total output of 1299-1301 (£183,792) provides the figure of c.£164,000 as an estimate of recoinage output in London and Canterbury.²⁶ In the calculations of penny output in 1299-1310 mints other than London and Canterbury supplied thirty-two per cent of the pence of class 9,²⁷ which approximately corresponds to the recoinage, and c.£75,000 must be added to the recoinage output to take account of this. An estimated total recoinage output of c.£240,000 may have been derived from c.£300,000-£350,000 in pollards and crockards reckoned at 1d. each, as they seem to have contained silver sufficient for about two thirds or three quarters of an English penny each overall.²⁸

TABLE 5. Estimates of the English silver currency, 1282-1351.

Date	English pence with deduction for wastage	Other sterlings	Groats	Halfpence and farthings	Total silver currency
1282	c.£760,000- £800,000		c.£20,000- £50,000	c.£40,000	c.£800,000- £900,000
1290	c.£900,000- £1,100,000	c.£90,000- £170,000		c.£50,000- £60,000	c.£1,000,000- £1,300,000
1299	c.£700,000- £840,000	c.£70,000- £130,000 +c.£300,000- £350,000		c.£40,000	c.£1,100,000- £1,400,000
1310	c.£1,300,000- £1,600,000	c.£130,000- £240,000		c.£70,000- £80,000	c.£1,500,000- £1,900,000
1319	c.£1,700,000- £2,000,000	c.£90,000- £200,000		c.£90,000- £100,000	c.£1,900,000- £2,300,000
1331	c.£1,400,000- £1,700,000	c.£70,000- £170,000		c.£70,000- £90,000	c.£1,500,000- £2,000,000
1351	c.£600,000- £720,000	c.£30,000- £70,000		c.£60,000- £70,000	c.£700,000- £900,000

²³ The 67 'other sterlings' in the Ickfield hoard, which constituted 13 per cent of a hoard deposited c.1295 (see Table 4), did not include imitative sterlings.

²⁴ M. Mate, 'Monetary policies in England, 1272-1307', *BNJ* 41 (1972), 34-79, at pp. 63-71; N.J. Mayhew and D.R. Walker, 'Crockards and pollards: imitation and the problem of fineness in a silver coinage', in *Edwardian Monetary Affairs* (as in n. 9), pp. 125-46, at pp. 126-7, 135-7; Mayhew, *Sterling Imitations of Edwardian Type* (as in n. 22), pp. 23-5; idem, 'From regional to central minting, 1158-1464', in *A New History of the Royal Mint*, pp. 83-178, at pp. 137-140.

²⁵ Mayhew, *Sterling Imitations of Edwardian Type* (as in n. 22), p. 24; idem, 'Modelling medieval monetisation', in R.H. Britnell and B.M.S. Campbell (eds), *A Commercialising Economy: England 1086 to c.1300* (Manchester, 1995), pp. 55-77, at pp. 65-7.

²⁶ N.J. Mayhew, 'The circulation and imitation of sterlings in the Low Countries', in idem (ed.), *Coinage in the Low Countries (880-1500): The Third Oxford Symposium on Coinage and Monetary History* (British Archaeological Reports International Series 54, 1979), pp. 54-68, at p. 61 estimated that the purchases of English silver at London, Canterbury, Chester, Exeter, Kingston-upon-Hull, Newcastle-upon-Tyne and the York royal mint in the year to Michaelmas 1300 (£136,341) included £130,000 from pollards and crockards.

²⁷ 1,851 class 9 pence in the 1299-1310 hoard data include 590 from mints other than London or Canterbury.

Table 5 provides estimates of the English silver currency and its constituent parts from 1282 to 1351.²⁹ Mayhew's estimates indicated that the total silver currency approximately halved between 1324 and 1351, and this is confirmed by Table 5. The silver currency was supplemented by foreign gold, particularly from the 1320s to the introduction of the English gold coinage in 1344.³⁰ The output of the gold noble coinage in 1344–51 (£154,454) may provide some indication of the size of the English gold currency in 1351, as the circulation of foreign gold rapidly declined after 1344.³¹ The contribution of gold is unlikely to have had a significant effect on the overall trend in Table 5, with an increase in the total currency until the second decade of the fourteenth century followed by a decline. Mavis Mate has argued that an increase in money supply due to the high mint outputs of 1304–9 was a principal cause of inflation in the early years of the fourteenth century, and she has also suggested that a fall in mint outputs and money supply caused deflation from the 1320s, which became acute in the late 1330s.³² The scarcity of silver coinage and deflation of the late 1330s and early 1340s is well attested from various sources.³³

²⁸ Mayhew and Walker, 'Crockards and pollards' (as in n. 24), pp. 128–30 discuss the fineness and weights of pollards and crockards. Many of these coins are as fine as the sterling silver English coinage, but some of them are only about one half, two thirds or three quarters fine. They may have been about 10 per cent lighter than new English pence, on average. *Liber Quotidianus Contrarotuloris Garderobae Anno Regni Regis Edwardi Primi Vicesimo Octavo* (London, 1787), pp. 5, 57, 67–8 records sales of pollards and crockards by Edward I's wardrobe, for recoinage, which yielded English coins equivalent to 41, 68 and 82 per cent of a penny each, after exchanging charges. Mayhew and Walker, op. cit., pp. 136–7 suggest that the transaction with a yield of 41 per cent may have involved fraud.

²⁹ Table 5 does not include the presumably negligible contribution of foreign coins other than sterling imitations. B.J. Cook, 'Foreign coins in medieval England', in L. Travaini (ed.), *Local Coins, Foreign Coins: Italy and Europe 11th–15th Centuries* (Milan, 1999), pp. 231–84, at pp. 254–5 reviews English finds of foreign deniers and gros, which made a limited contribution to the currency.

³⁰ Mate, 'The role of gold coinage', pp. 127–35 (as in n. 9); P. Spufford, *Money and its Use in Medieval Europe* (Cambridge, 1988), pp. 281–2; Mayhew, 'From regional to central minting, 1158–1464' (as in n. 24), pp. 148, 157; Cook, 'Foreign coins in medieval England' (as in n. 29), pp. 255–60.

³¹ *A New History of the Royal Mint* (as in n. 1), pp. 679–80 summarises the mint outputs of 1344–51. The total for 1344–51 excludes the unsuccessful gold coinage from 20 January to 10 July 1344, which was demonetised on 20 August 1344.

³² M. Mate, 'High prices in early fourteenth-century England: causes and consequences', *Economic History Review* 2nd ser. 28 (1975), 1–16. Mayhew, 'Numismatic evidence and falling prices' (as in n. 2), pp. 14–15 offered the decline in his estimates of the currency as a possible explanation of deflation in the first half of the fourteenth century.

³³ E.B. Fryde, 'Parliament and the French War, 1336–40', in T.A. Sandquist and M.R. Powicke (eds), *Essays in Medieval History Presented to Bertie Wilkinson* (Toronto, 1969), pp. 250–69, at pp. 263–5, 267; idem, 'The financial policies of the royal governments and popular resistance to them in France and England, c.1270–c.1420', *Revue belge de philologie et d'histoire* 57 (1979), 824–60, at pp. 839–40; J.R. Maddicott, *The English Peasantry and the Demands of the Crown 1294–1341* (Past and Present Supplement 1, 1975), p. 50; Prestwich, 'Currency and the economy in early fourteenth century England' (as in n. 9), pp. 46–53; idem, 'The Crown and the currency' (as in n. 9), pp. 51–4.

SCOTTISH COINAGE IN THE FIRST HALF OF THE FOURTEENTH CENTURY

N.M.McQ. HOLMES AND LORD STEWARTBY

BETWEEN the deposition of John Balliol in 1296 and the 1350s very little coinage appears to have been produced in Scotland. The loss of Berwick to the English in 1296 deprived the Scots of their principal mint and, during the Wars of Independence that followed, until the middle years of Robert Bruce (1306–29), there was insufficient control or security to sustain a Scottish coinage. Thus, although huge quantities of silver were coined in England during the first quarter of the fourteenth century, hoard evidence suggests that none was minted in Scotland until towards 1320, when supplies of silver to London and Canterbury were already beginning to tail off. The revival of Scottish coinage at this period seems likely to date from 1318, with the recovery of Berwick, where English coins had been struck since 1296, rather than from 1313 or 1314 when Perth, Roxburgh, Edinburgh and Stirling were successively regained.

Continental moneyers were undoubtedly recruited for Bruce's coinage, which is of a much higher standard of workmanship than the later English coins of Berwick or indeed than much of the Scottish coinage that preceded it. During the 1320s, however, shortage of silver led to the virtual cessation of coinage in England, and similar conditions may have applied in Scotland, with the result that the main output of Bruce's coinage belonged to a short period in the years around 1320, with very little towards the end of the reign. Most of the English coinage of the first half of the 1330s consisted of halfpence and farthings, and to this period it has been suggested that a small coinage of the same fractional denominations in the name of Robert's son David II (1329–71) could belong.¹

Virtually nothing has been written in detail on the coins of Robert I since Burns more than a century ago, and in view of their general uniformity this is not surprising. However, the discovery of nineteen sterlings of this reign in the 1995 find from Ednam in Roxburghshire prompts us to attempt a die analysis of a substantial sample of this coinage and to put forward a more detailed classification. Shortage of material has meant that the earliest coinage of David II has also lacked systematic treatment hitherto, but the appearance of a few more specimens in recent years as a result of metal-detecting has added a number of new varieties which now make it timely to produce a corpus of this small but remarkably varied series.

ROBERT I

The classification of Robert's coins here proposed divides the material into four classes, the second and third of which are confined to sterlings, or pence, and the fourth to halfpence. The numbers of coins involved in our study are as follows:

Class	I	II	III	IV
Pence	64	10	2	–
Halfpence	16	–	–	2
Farthings	12	–	–	–

¹ I. Stewart, 'Scottish Mints', in *Mints, Dies and Currency: Essays in Memory of Albert Baldwin*, edited by R.A.G. Carson (London, 1971), pp. 165–289, at pp. 223–4.

Our arrangement confirms and expands that of Burns who, with typical insight, not only described and illustrated three varieties of pence but also placed them in what we believe to be the correct sequence.² The late halfpence which we have labelled class IV were not known to Burns nor to other previous writers.

Pence

These all read ROBERTVS DEI GRA, with a left-facing profile head and sceptre; and on the reverse SCO / TOR / VMR / EX+, with a five-pointed mullet in each quarter of the cross. The three classes may be described thus:

I Colon stops (B. fig. 225)

Shapely crown (1); the fleurs with bold side petals; the central fleur tall, with the outside of the left petal convex but that of the right concave. The hair consists of three thick strands (with a minute horizontal stroke just under the crown, but often not visible), and a row of small curls at the bottom. Colons each side of the initial cross and between the words; one die has only a single pellet after the cross (12) and two lack the colon after GRA (10 and 13). The A is unbarred on all except three dies (10, 12 and 15). C is open. R has an unusually elaborate tail, which projects lower than the base of the upright (Fig. 1, 1). S is composite with a narrow centre (Fig. 1, 2). E is closed and displays damage to the top of the punch as the issue progresses (Fig. 1, 3).

II Colon and 'triple-colon' stops combined (B. fig. 226)

Same head as class I, but new crown and hair. This crown (2) has thin petals to the side fleurs and the central fleur of battle-axe shape. The new hair has a short, thick and nearly horizontal stroke at the top and a row of three crescents (opening inwards) at the bottom. Stops of two and three pellets appear in the following combinations on recorded dies: 2,3,2,2 (die 1); 2,3,3,3 (dies 2 and 3); 3,2 or 3,3, 0 (die 4 – no stop after GRA). A is always unbarred. E is broken in every case.

III 'Triple-colon' stops, with new portrait (B. fig. 226A)

New, smaller face with less prominent lips, a short neck, and the shoulder clearly indicated. Crown 2. New, complex hair, with five strands and a short tuft below. One die only, with colon after initial cross and 'triple-colons' thereafter. A is unbarred. New letter E on obverse (Fig. 1, 4).



Fig. 1 Forms of lettering on Robert Bruce pence.

The number of dies in our sample (and of those represented by a single specimen) are as follows (omitting the uncertain reverse die linked with obverse 14 on a coin from the Renfrew hoard):

	Class I		Class II		Class III		Total	
	obv.	rev.	obv.	rev.	obv.	rev.	obv.	rev.
Dies	17	20	4	4	1	1	22	24
Singletons	5	2	2	1	0	0	7	3

These figures suggest that obverses and reverses may have been supplied in about equal numbers. Whilst the number of reverses found in the sample was slightly greater, the larger number of obverse singletons indicates that more obverses than reverses may await discovery.

² E. Burns, *The Coinage of Scotland* (Edinburgh, 1887), vol. I, pp. 229–30.

³ N.M. McQ. Holmes, 'The Ednam, Roxburghshire. Hoard (1995)', *BNJ* 66 (1996), 33–59.

Class I was clearly the main issue, and to judge from the degree of die linkage it belongs to a relatively intense period of minting. All nineteen Robert sterlings in the Ednam hoard, buried 1321/2 (on the basis of the latest English coins being of Fox group XVb), were of this class,³ and there is little doubt that it is the earliest. Within class I the dies have been listed in a sequence which die links and the appearance of the broken E punch suggest may be approximately correct. The punch appears intact on obverse dies 1–8 and 10–11. Very slight damage is apparent on dies 9 (one letter only) and 12. On the one known coin from obverse die 13 the situation is unclear, but the upper part of the letter is broken on dies 14–17. On reverse dies A–N the E is intact. Dies O and Q are uncertain, but very slight damage is apparent on P and R. The letter is broken on S–U.

One example of the very rare class II was present in the 1963 Renfrew hoard, the English element of which closed slightly earlier (early XVa) than at Ednam.⁴ This suggests that class II must have followed very closely upon class I, although no reverse die link is known between the two. Half of the ten recorded specimens of class II are from the pair of dies represented in the Renfrew hoard, and this is likely to have been the earliest. This pair of dies is notable for the fact that the O on the obverse (1) appears to be punched over an E, whilst the reverse (A) has M unbarred and two different Rs – the first with ornate tail, as class I, and the second with a wedge. This is the only occurrence of the latter form of the letter in this coinage. At the other end of class II, reverse die D may be the latest, since it has a broken O and was also used with the single class III obverse. The four reverses of classes II–III all have the same broken E as on class II obverses. The obverse die of class III has a replacement E, not found on any reverse. As Burns observed, this obverse die has a portrait very similar to that on a sterling from Alost of Robert, Count of Flanders, which also exhibits ‘triple-colon’ stops.⁵ The great rarity of classes II and III points to a period of declining mint output in the early 1320s: Canterbury closed in 1323 and London ceased to strike pence in 1324.

Burns believed that the weight of the Scottish penny had been reduced at the commencement of Bruce’s coinage, to a theoretical $21\frac{3}{4}$ grains. He based this on the wording of a document entitled *The Assize of King David of Mesuris and Wechtis* and on a study of the Balliol and Bruce pennies in the Montrave hoard.⁶ The twelve Bruce pennies, which Burns described as ‘all in the same condition as struck, having apparently sustained no diminution of weight by clipping’, gave an average weight of $21\frac{1}{2}$ grains. This study of seventy-six pennies provides an opportunity to reconsider his theory.

The fifty-two class I pence with recorded weights provided an average weight of 21.17 grains, the figure being 21.08 for specimens known to be from hoards and 21.31 for others. For class II pence the average weights are 21.86 grains (overall), 20.68 (hoards) and 22.34 (others). The high overall average for class II and the discrepancy between the second and third figures, in a total of just ten coins, are largely caused by one exceptionally heavy specimen in the British Museum (26.54 grains). The two class III pence weighed 25.00 and 19.44 grains. The figures for class I, which must be the most reliable, would seem to demonstrate, first, that hoard specimens are no more and no less reliable as indicators of theoretical weight than others and, second, that the average weight of the Montrave coins, as stated by Burns, fairly accurately represented that of other surviving specimens.

A further check may be applied by examining the nineteen coins from the Ednam hoard. These can be shown to have been minted only a short while before the deposition of the hoard, not only because the latest English coins belong to the period 1321–2, but also on account of the die-linked groups within the assemblage.⁷ The average weight of these coins was 21.29 grains. By comparison, the average weight of the English class XVb pennies in the same hoard, which included die-linked groups from the Durham mint, was 21.18 grains. Since the theoretical weight of English pennies was still 22.22 grains at that time, we are obliged to conclude that those of Bruce were

⁴ P. Woodhead and I.H. Stewart, ‘The Renfrew Treasure Trove 1963’, *BNJ* 35 (1966), 128–47.

⁵ Burns, as in n. 2, p. 230.

⁶ Burns, as in n. 2, pp. 228–9. Mrs J.E.L. Murray regarded the idea as unlikely, and questioned the date of the documentary evidence, as her unpublished notes make clear.

⁷ Holmes, as in n. 3, at p. 38.

being made to a similar standard, despite the difference of a full grain between the theoretical figure and the average of these recently-minted specimens. It should be noted that the Ednam coins were cleaned before being weighed, and although most specimens displayed little visible sign of corrosion when unearthed, the effects of chemical cleaning may account for some of the discrepancy.

Mention may also be made here of a strange coin, purporting to be a sterling of Robert I, which reads ROBERTVS DEI GRATI (PL. 4). There is a colon to each side of DEI, a single pellet stop after GRATI, and another before REX on the reverse. The head wears a very narrow crown, and thick strands of hair trail out behind it. The fleur-de-lis on the sceptre head is represented by a bar with two pellets pendant from it. The dies are well made, but the flan is larger and thinner than on Scottish sterlings of this period, its greater size permitting the extension of GRA to GRATI (a reading unparalleled on any Scottish coin of the period). The low weight (18.4 gr.) and odd style also leave little doubt that it is a continental imitation, and its provenance – acquired in Copenhagen c.1992 from a group of contemporary pennies – is consistent with this. Direct copies of Scottish sterlings of the Edwardian period are very rare, and this is the only example we have seen based on a Robert prototype.

LIST OF PENCE AND DIES

Class I

Obverse dies 1–17; reverse dies A–U, except I.

All obverse dies read + : ROBERTVS : DEI : GRA : except 10 and 13 (no stop after GRA), and 12 (single pellet after cross); on die 7 stops before and after cross are uncertain. All reverse dies read SCO / TOR / VMR / EX+. The E is of Gothic form in each case, and is broken on later dies.

1A

Burns I, fig. 225 (NMS H.C16747)	1.38 / 21.29
NMS, ex Noel Paton collection (A.1905.1163)	1.44 / 22.20
Ashmolean, ex Hird collection (SCBI 35, 318)	1.42 / 21.91
Lockett sale (1960), lot 785	unknown

1B

Ednam hoard (1995), 1429 (NMS K.1997.328)	1.43/22.06
BM, Parkes Weber gift (1906.11–3.4476)	1.33/20.52

1C

Loch Doon hoard (1966), ⁸ 1850 (NMS H.C1534)	1.13/17.94
Ednam hoard (1995), 1430	1.42/21.91

2C

Ednam hoard (1995), 1435	1.34/20.68
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2D

Renfrew hoard (1963), 662 (NMS H.C1532)	1.38/21.29
Ednam hoard (1995), 1431	1.41/21.76
BM, ex Beaumont Treasure Trove (1885.3–1.8)	1.22/18.82
Stewartby collection (1)	1.38/21.29

3E

Richardson (1901), ⁹ 1 (NMS H.C1528)	1.49/22.99
Ednam hoard (1995), 1428	1.44/22.20
ex W. Elliot collection	unknown

4E

Blackhills hoard (1911) (NMS H.C1530)	1.40/21.60
Loch Doon hoard (1966), 1851	unknown

⁸ P. Woodhead, I.H. Stewart and G.L.V. Tatler, 'The Loch Doon Treasure Trove, 1966', *BNJ* 38 (1969), 31–49.

⁹ A.B. Richardson, *Catalogue of the Scottish Coins in the National Museum of Antiquities, Edinburgh* (Edinburgh, 1901).

4G

Ednam hoard (1995), 1432	1.41/21.76
Ednam hoard (1995), 1439	1.18/18.21
Lockett sale (1960), lot 786 (ex Bearman collection)	unknown

5G

Ednam hoard (1995), 1440 (NMS K.1997.331)	1.36/20.98
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6H

Ednam hoard (1995), 1427 (NMS K.1997.327)	1.46/22.53
BM, ex Amble Treasure Trove (1989.12-1.8)	1.29/19.90
Lockett sale (1957), lot 119	unknown

7J

Whitburn hoard (1988), ¹⁰ 240	1.34/20.68
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8K

Ednam hoard (1995), 1436 (NMS K.1997.330)	1.33/20.52
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9K

BM, ex Montrave hoard (1922.5-1.101)	1.44/22.20
<i>NCirc</i> January 1971, no. 656	unknown

9L

NMS ex Lindsay Carnegie bequest (A.1911.506.1076)	1.42/21.91
BM, Grueber S.22 ¹¹	1.44/22.20

10M

Richardson (1901), 2 (NMS H.C1535)	1.30/20.06
Ednam hoard (1995), 1445	1.41/21.76

11M

Hunterian, ex Hunter collection (<i>SCBI</i> 35, 320)	1.31/20.21
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11N

NMS H.C1529 (unprovenanced)	1.30/20.06
Loch Doon hoard (1966), 1849 (NMS H.C1533) (badly chipped)	0.96/14.81
Stewartby collection (2), ex Drabble 1187	1.38/21.29
Loch Doon hoard (1966), 1848 (NMS, missing)	unknown

11O

J.K.R. Murray sale (1987), lot 125	unknown
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12O

Richardson (1901) 3 (NMS H.C1536)	1.39/21.45
Ednam hoard (1995), 1441	1.46/22.53
Glendining sale 24th September 1970, lot 587	unknown

12P

Stewartby collection (3)	1.45/22.37
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13P

Stewartby collection (4) (with broken piercing)	1.34/20.68
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¹⁰ N.M.McQ. Holmes, 'Old and New Edwardian Hoards from Scotland', *BNJ* 64 (1994), 41-69.

¹¹ H.A. Grueber, *Handbook of the Coins of Great Britain and Ireland in the British Museum* (London, 1970).

14Q

NMS H.C4145 (unprovenanced)	1.43/22.06
Stewartby collection (5) (? clipped)	1.29/19.90
Spink sale (23 June 1988), lot 17	unknown

14R

Whitburn hoard (1988), 241	1.24/19.13
BM, ex Morgan (Evans) collection, ex Tutbury hoard (1915.5–7.2090)	1.48/22.84
BM, Parkes Weber gift (1906.11–3.4475)	1.47/22.68

14S

Ashmolean, ex Browne Wilkinson (<i>SCBI</i> 35, 319) (pierced)	1.13/17.44
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14 (uncertain reverse)

Renfrew hoard (1963), 659 or 660 (<i>BNJ</i> 1966, Plate XIII, 25); possibly an otherwise unrecorded reverse die, but uncertain from published photograph	unknown
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15S

Burns 2, not illustrated (NMS H.C16748)	1.34/20.68
Ednam hoard (1995), 1442 (NMS K.1997.332)	1.45/22.37
Ednam hoard (1995), 1443	1.44/22.20
Ednam hoard (1995), 1444	1.42/21.91
Lockett sale (1957), lot 120 (ex Bearman collection)	unknown

16S

Renfrew hoard (1963), 661 (NMS H.C1531)	1.31/20.21
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17S

Ednam hoard (1995), 1434	1.35/20.83
Ednam hoard (1995), 1438	1.23/18.98

17T

Ednam hoard (1995), 1433 (NMS K.1997.329)	1.37/21.14
Ednam hoard (1995), 1437	1.31/20.21

17U

ex Montrose hoard (1973) (NMS H.C4146)	1.24/19.13
Stewartby collection (6), ex Fred Baldwin collection	1.35/20.83

Class II

New crown and hair punches. E always broken. Obverse dies read as follows:

- 1 + : ROBERTVS : DEI : GRA :
 2, 3 + : ROBERTVS : DEI : GRA :
 4 + : ROBERTVS : (or ð) DEI : GRA

Reverses as class I.

1A

Burns 3, fig. 226 (NMS H.C16749)	1.35/20.83
NMS ex Noel Paton collection (A.1905.1164) (clipped/chipped)	1.20/18.52
Hunterian, ex Renfrew hoard (1963), 663 (<i>SCBI</i> 35, 321)	1.22/18.82
Stewartby collection (7)	1.43/22.06
ex W. Elliot collection	unknown

2A

BM, ex Carsphairn hoard (1914.9–4.187)	1.46/22.53
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2B

NMS, from Forgue, near Huntly, Aberdeenshire, J. Wright gift (H.C1538)	1.29/19.90
Lockett sale (1957), lot 121 (probably these dies)	unknown

3C

BM (1956.10–2.2)	1.72/26.54
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4D

NMS, ex J.K.R. Murray sale (1987), lot 126 (H.C4147)	1.45/22.37
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Class III

New portrait, with shoulder; crown as class II.

Obverse reads + : ROBERTVS : DEI : GRA :

5D

Stewartby collection (8) = Burns fig. 226A, ex Fred Baldwin, ex Cochran-Patrick collection	1.62/25.00
NMS, ex Lockett sale (1960), lot 787, ex Bearman ex Witte collections (H.C1537)	1.26/19.44

Halfpence

Halfpence of this reign are very rare. The types and inscriptions are the same as those of the pennies, except that mullets are placed in only two of the four quarters of the reverse. Two classes may be distinguished.

- I Bust as on class I pennies. The hair consists of two main strands curling inwards, enclosing an inner curl, and a row of crescents below. There are colons to each side of the initial cross and between the words. The lettering includes open E, wedge-tailed R and composite S; two reverse dies (B and F) have unbarred M. The mullets are in the TOR and EX+ quarters.
- IV Coarse bust, with three long strands of hair, curling outwards at the bottom. Colons between the words, but not by the initial cross. C and E are open; R has an ornate tail. The mullets are in the SCO and VMR quarters (the former double-punched).

Four obverse and six reverse dies have been noted of class I. Obverse die 1 has four crescent curls at the base of the hair, a tightly dotted inner circle, and the sceptre head under G of GRA; there is a tiny point between the pellets of the colon after GRA, but this does not amount to a real 'triple colon'. Dies 2, 3 and 4 have three crescents in the hair and looser circles. On die 2 the sceptre head is below the G, on dies 3 and 4 below the R. Two of the obverse dies (2 and 3) and two of the reverses (A and C) are known from only a single specimen, implying the distinct possibility that further dies may be found. Halfpenny dies, unlike penny dies, might have been used in a ratio of two reverses per obverse, but the fact that five different reverses are found with obverse die 1 could mean merely that this obverse was long-lasting and that new reverses were supplied at intervals to be paired with it. All four halfpence of this reign in the Renfrew hoard were of class I and correspond to class I pence.¹² Since there are no halfpence corresponding to pence of classes II and III with 'triple colons', it is possible that class I halfpence continued to be produced alongside them.

Class IV halfpence – two specimens from the same pair of dies – are hitherto unpublished. The style of these coins differs considerably from that of class I, and they could belong to a period later than any of the sterlings. The lettering is looser, and the points of the colons more widely separated, than on other coins, pence or halfpence, of Robert I. In England the production of pennies had virtually ceased after 1324, and minting was thereafter concentrated on farthings and halfpence until the 1340s. That similar conditions prevailed in Scotland is indicated by the fact

¹² Woodhead and Stewart, as in n. 4.

that the earliest coinage of David II apparently consists only of halfpence and farthings, and it could be that the class IV halfpence of Robert represent an equivalent issue from the second half of the 1320s.

The average weight of the halfpence included in this survey is only 9.50 grains, the figures for hoard and non-hoard specimens being almost identical. Even when an allowance is made for the possibility that a greater proportion of the weight of smaller coins might be lost through corrosion and cleaning, a scaled-up figure bears no relation to the average for the pennies and suggests that actual weights of surviving coins of fractional denominations are unreliable for estimating theoretical weights of corresponding pennies.

LIST OF HALFPENCE AND DIES

Class I

Neat work as class I pence. Mullets in TOR and EX+ quarters.

Obverses all read + : ROBERTVS : DEI : GRA :

All Es of Gothic form.

	<i>Weight (g/gr)</i>
<u>1A</u> BM, Grueber S.23	0.64/9.88
<u>1B</u> Renfrew hoard (1963), 665 (NMS H.C1541) Stewartby collection (1)	0.58/8.95 0.59/9.10
<u>1C</u> Renfrew hoard (1963), 664 (NMS H.C1540)	0.56/8.64
<u>1D</u> Burns 1 (bis), not illustrated (NMS H.C16751) Lockett sale (1957), lot 122 J.K.R. Murray sale (1987), lot 127 Ashmolean (SCBI 35, 323) – probably this die combination (reverse worn)	0.73/11.26 unknown unknown 0.56/8.64
<u>1E</u> Burns 1, fig. 227 (NMS H.C16750) Ashmolean (SCBI 35, 322) Glendinning sale 23–24 September 1970, lot 588	0.63/9.72 0.53/8.18 unknown
<u>2E</u> Stewartby collection (2) (large chip)	0.58/8.95
<u>3D</u> Hunterian, purchased 1993, ex Bearman, ex Murdoch sale (1903) lot 44	0.65/10.03
<u>4D</u> Metal-detector find from Crail, Fife, 1999	0.58/8.95
<u>4F</u> Richardson (1901) 4, fig. 27 (NMS H.C1542) Renfrew hoard (1963), 666 (NMS H.C1543) Renfrew hoard (1963), 667 Stewartby collection (3)	0.65/10.03 0.67/10.34 unknown 0.67/10.34

Class IV

Coarse bust. Mullets in SCO and VMR quarters. One pair of dies only recorded.

NMS, ex J. Davidson collection (H.1996.228)

0.53/8.18

Stewartby collection (4)

0.65/10.03

Farthings

Until the discovery of seven Robert farthings in the Renfrew hoard these coins were of extreme rarity. Their types are as the pennies, on a very small scale. Among the twelve coins studied there were, curiously, more obverse dies (five) than reverses (three). Two of the obverse dies are, however, each known from a single example (2 and 5). Two obverse dies have at least one colon in the inscription (1 and 2), one (3) has no stops, and the other two (4 and 5) have single pellet stops. All these dies, however, are stylistically similar and probably belong to the period of the class I pence and halfpence, the difference in stops being due to limited space on these tiny coins. The lettering has open E, wedge-tailed R and composite S, and on all three reverse dies the M appears to be unbarred. Reverse die B has the letter V double-punched.

The average weight of the farthings studied is only 4.32 grains, the figures for hoard and non-hoard specimens again being almost identical. Scaled up, the equivalent penny weight of only 17.28 grains is quite clearly entirely misleading.

LIST OF FARTHING AND DIES

Obverse dies read as follows:

- 1 + : ROBERTVS · DEI · GRA · (or :)
- 2 + : ROBERTVS : DEI : GRA :
- 3 + ROBERTVS DEI GRA
- 4 + · ROBERTVS · DEI · GRA [?]
- 5 [+ (?)] ROBER [TVS] · DEI · GRA [?]

Weight (g/gr)

1A

Burns I, fig. 228 (NMS H.C16752)

0.34/5.25

Stewartby collection (1); ex Ashmolean duplicates; ex Dakers sale (1946), lot 333; ex Cochran-Patrick sale (1936), lot 177; ex

Advocates' duplicates (1873), lot 31 (broken)

0.25/3.86

2B

Richardson (1901) 5, fig. 28 (NMS H.C1548)

0.28/4.32

3B

Renfrew hoard (1963), 668 (NMS H.C1544)

0.33/5.10

Renfrew hoard (1963), 669

0.24/3.70

Renfrew hoard (1963), 670 = Stewartby collection (2)

0.33/5.10

Renfrew hoard (1963), 671 = Hunterian (SCBI 35, 326)

0.20/3.09

BM (1903.0607.4)

0.29/4.47

3C

Renfrew hoard (1963), 672 (NMS H.C1545)

0.23/3.55

4B

Renfrew hoard (1963), 673 (NMS H.C1546) (chipped)

0.26/3.70

4C

Hunterian, ex Hunter collection (SCBI 35, 325)

0.24/3.70

5C

Ashmolean, ex Corpus Christi College collection (SCBI 35, 324)

0.32/4.94

DAVID II, EARLY COINAGE

David II, who succeeded his father Robert in 1329 at the age of five, was sent to France in 1333 after the English campaign on behalf of Edward Balliol, during which the Scots again lost control of Berwick. David returned to Scotland in 1341, and by 1343 he and his supporters had regained control over much of the country, with English garrisons remaining only at Berwick, Jedburgh and Lochmaben.¹³ After invading England in 1346, however, David was defeated and captured at the Battle of Neville's Cross, only regaining his freedom eleven years later in return for the promise of a ransom of 100,000 marks. In 1358, within a few months of his release, he instituted a Scottish groat coinage after the model of Edward III's new coinage of 1351.

The pre-1358 Scottish coins of this reign consist of an extensive series of REX SCOT(T)ORVM pennies with mullets of six points on the reverse, some extremely rare halfpence and a farthing, also with six-pointed mullets,¹⁴ and a small group of halfpence and farthings with five-pointed mullets. Burns convincingly attributed the pennies to the 1350s on the ground that their average weight fell well short of the 18 gr. standard adopted by the English in 1351 and that they therefore fitted the context of a proclamation of 1356 by Edward III, ordering that Scottish coin recently issued should not be current in England on account of its deficient weight and fineness.¹⁵ He was not, however, aware of the existence of halfpence or farthings with six-pointed mullets, and by listing and illustrating the halfpence and farthings with five-pointed mullets after the REX SCOT(T)ORVM pence he implicitly grouped all David's pre-1358 coins together as a single series. Some half a century later Dakers published a number of specimens of both types of halfpenny and described one farthing unknown to Burns. He suggested that halfpennies with five-point mullets might be contemporary with the later 'groat issue'.¹⁶ The greater number of specimens of the fractions now available enables the early coinage of David II to be reassessed, with the conclusion that the halfpence and farthings with five-pointed mullets constitute a separate issue, earlier than the pennies of the 1350s.¹⁷

The coins

The halfpence and farthings bear the same basic design features as those of Robert Bruce – a bust facing left with sceptre, and a single long cross with five-pointed mullets in two opposing angles on the halfpennies and in all four angles on the farthings. Within these general parameters, however, are a number of substantial variations, particularly in the form of the obverse and reverse legends. Given the still relatively small number of known specimens, both the extent of these variations and the number of recorded dies are remarkable.

There are specimens of both denominations which bear the inscription +MONETA REGIS D // +AV / IDS / COT / TOR. 'Moneta' readings are not uncommon on the continent, but are not otherwise known on Scottish coins of this period. More conventionally there are obverses reading both +DAVID DEI GRACIA and +DAVID DEI GRA REX, both of which are frequently combined with reverses reading +RE / XSC / OTO / RVM, with the word REX being repeated in the case of the latter obverse. There are also mules both ways between obverses and reverses of the two basic readings, as well as a single farthing reverse reading GIS / SCO / TTO / RV+, for which no sensible obverse combination is known to exist.

Sixteen examples of halfpennies have been examined by the writers, and for these a total of six obverse and eight reverse dies were used. For the twelve farthings recorded, three obverse and seven reverse dies were utilised.

¹³ P.G.B. McNeill and H.L. MacQueen (editors), *Atlas of Scottish History* (Edinburgh, 1996), pp. 104–7.

¹⁴ I.H. Stewart, *The Scottish Coinage*, revised edition (London, 1967), pp. 26 and 195; N.M.McQ. Holmes, 'An Unrecorded Farthing Type of David II of Scotland', *BNJ* 66 (1996), 126.

¹⁵ Burns, as in n. 2, p. 232.

¹⁶ H.J. Dakers, 'The First Issue of David II', *BNJ* 23 (1938–41), 51–8.

¹⁷ Stewart, 'Scottish Mints', as in n. 1, pp. 223–4.

HALFPENNY DIES

All Es of Gothic form

Obverse

- A [+MO]N[ETA] REGIS D; sceptre angled
 B +MONETA:REGIS:D; sceptre vertical
 C +DAVID:DEI:GRA:REX; small head; long neck; sceptre angled
 D +DAVID:DEI:GRA:REX; sceptre vertical
 E +DAVID DEI GRACIA; sceptre angled
 F +DAVID:DEI:[GRACI]A; sceptre angled

Reverse

- a +AV / []S / [] / TOR; mullets in first and third quarters
 b +AV / ID:S / COT / TOR; mullets in second and fourth quarters
 c +AV / IDS / COT / TOR; mullets in second and fourth quarters
 d +RE / X:SC / OTO / RVM; Gothic M; mullets in first and third quarters
 e +RE / XSC / OTO / RVM; Gothic M; mullets in second and fourth quarters
 f [] / XSC / OTO / RV[]; mullets in second and fourth quarters
 g +RE / X:SC / OTO / RVM; ? unbarred Roman M; mullets in first and third quarters
 h +RE / X:SC / OTO / RVM; M resembles double-barred H; mullets in second and fourth quarters

HALFPENNIES: DIE COMBINATIONS

- Aa NMS K.1999.256; found near Jedburgh, 1998; 0.44 g, 6.79 gr; badly chipped
 Bb NMS H.C1549; ex Murdoch sale (May 1903), lot 47; 0.52 g; 8.02 gr.
 Cb Stewartby collection (1); ex J.E.L. Murray collection (purchased 1995 from P. Finn); 0.47 g, 7.25 gr.
 Db Burns fig. 248A; found at Dunblane; ex Lockett sale (1957), lot 127; ex Cochran-Patrick sale (1936), lot 188; present location unknown.
 Dc Stewartby collection (2); ex D.S. Napier sale (1956), lot 213; 0.39 g, 6.02 gr.; badly chipped.
 NMS K.1999.1155; found in Cumbria, 1998; 0.52 g, 8.02 gr.
 NCirc May 1987, no. 3020, and November 1987, no. 6485; present location unknown.
 Dd NMS H.C16788; Burns fig. 248; Coats of Ferguslie collection; 0.63 g, 9.72 gr.
 Stewartby collection (3); ex J.E.L. Murray collection; 0.51 g, 7.87 gr.
 De NMS H.C1550; ex Lockett sale (1957), lot 125; ex Dakers sale (1946), lot 347?; 0.61 g, 9.41 gr (plugged).
 ?e Private collection, England; obverse mis-struck – die uncertain; 0.43 g, 6.63 gr; slightly chipped.
 Ef Spink auction 119 ('Douglas' collection, 4 March 1997), lot 336; present location unknown.
 Eg Stewartby collection (4); ex Drabble sale (1943), lot 1190; 0.56 g, 8.64 gr.
 Fg British Museum; ex Murdoch sale (May 1903), lot 46; 0.44 g, 6.79 gr; slightly chipped
 Private collection, England; one quarter of coin missing, possibly cut deliberately; 0.35 g, 5.40 gr.
 Fh Stewartby collection (5); NCirc December 1987, no. 7146, and April 1988, no. 2192; 0.55 g, 8.49 gr.

FARTHING DIES

All Es of Gothic form.

Obverse

- A +MONETA:REGIS:D:
 B +DAVID:DEI:GRACIA
 C +DAVID:DEI GRACIA

Reverse

- a +AV / IDS / COT / TOR
 b +AV / IDS / COT / TOR
 c GIS / SCO / TTO / R+; contraction mark in form of a cross-bar at the tail of the R
 d +RE / XSC / OTO / RVH
 e +RE / X·SC / OTO / RVM (stop possibly ·, with only lower pellet visible)
 f [+R] E / X·SC / OTO / RVM
 g +RE / XSC / OTO / RVM

FARTHING: DIE COMBINATIONS

- Aa NMS H.C16789; Burns 1, Fig. 249; Coats of Ferguslie collection; 0.31 g, 4.78 gr.
NCirc April 1985, lot 2029, May 1992, no. 2610, and July 1993, no. 4362; present location unknown
- Ab Stewartby collection (1); ex R. Carlyon-Britton collection; 0.35 g, 5.40 gr.
- Ac Stewartby collection (2); A.H. Baldwin and Sons Ltd. (Jan. 1996); 0.22 g, 3.40 gr.
- Ad NMS K.1999.229; found in East Yorkshire, 1998; 0.25 g, 3.86 gr; badly chipped
 Stewartby collection (3); A.H. Baldwin and Sons Ltd. (April 1985); 0.29 g, 4.47 gr.
- Ae Private collection; found in SW Gloucestershire; 0.29 g, 4.47 gr.
- Bb NMS H.C1551; Burns fig. 249A; ex Lockett sale (1957), lot 128; ex Cochran-Patrick sale (1936), lot 189; 0.28 g, 4.32 gr.
 Stewartby collection (4); 0.28 g, 4.32 gr.
- Bd NMS H.C1552; ? ex Sheriff Mackenzie sale (1921), lot 190 ('dredged up from the Severn');¹⁸ 0.21 g, 3.24 gr; slightly chipped
- Bf British Museum (R.W. Cochran-Patrick, *Records of the Coinage of Scotland*, Pl. II, no. 3); 0.29 g, 4.47 gr.
- Cg NMS H.C4444; *NCirc* April 1990, no. 1793; 0.28 g, 4.32 gr.

Discussion

There are two major questions which need to be answered concerning these coins. First, can they all be accepted as belonging to a single uninterrupted issue, despite the use of a wide range of inscriptions, and second, when and where are they likely to have been minted?

On the surface, there is a clear distinction between those coins of both denominations which bear the MONETA REGIS D / AVID SCOTTOR legends and those with DAVID DEI GRACIA (or GRA REX) / REX SCOTORVM. Against this, there is no obvious difference in style of bust or form of lettering between the two groups, and there are numerous die interchanges between the two types. The coins would seem to indicate that the whole issue belongs to a time of experimentation at the

¹⁸ There is some doubt over the history of this coin. NMS registers state that it was dredged up from the Severn towards the end of the nineteenth century and came into the possession of a Mr Maish of Bristol, who sold it to Sheriff Thomas Mackenzie. However, contemporary correspondence found in the museum makes it clear that it was purchased for thirty shillings from a Mr N.E. Mackenzie in September 1921 – some seven months after the sale of Sheriff Thomas Mackenzie's collection. It is by no means certain, therefore, that this coin ever formed part of the Sheriff Mackenzie collection.

Scottish mint, with dies bearing the different legends in use either together or immediately consecutively.

Amongst the sixteen recorded halfpennies, there are five specimens reading DAVID DEI GRA REX / AVID SCOTTOR (die combinations Cb, Db and Dc), but as yet there are no known coins with the converse mule. One of these coins bears an unusual bust type, with a small head and a long neck (die C). There are also three halfpennies reading DAVID DEI GRA REX / REX SCOTORVM, but no reverse is known which reads SCOTORVM only. It is notable that the obverse legend DAVID DEI GRACIA is paired only with the appropriate reverse REX SCOTORVM (die combinations Ef, Eg, Fg and Fh). This may be an indication that this was the form finally adopted at the end of a period of experimentation.

The farthings present a slightly different picture, but one which points to a similar conclusion. Farthings reading 'Moneta Regis' account for seven out of the twelve recorded examples, compared with only two (out of sixteen) halfpennies with this inscription. There are mules both ways, reading MONETA REGIS D / REX SCOTORVM (Ad and Ae) and DAVID DEI GRACIA / AVID SCOTTOR (Bb), and there is one very strange reverse which reads GIS SCOTTORV (c). There is no recorded example of an obverse legend – perhaps reading MONETA DAVID RE – which would link correctly with this. The obverse DAVID DEI GRA REX is not known on farthings at all, and again it seems likely that DAVID DEI GRACIA / REX SCOTORVM eventually became the preferred option.

If the assumption that all the coins under consideration form part of a single issue does seem likely to be correct, how reliable is their attribution to Berwick during the period 1329–1333?

English coinage in the second quarter of the fourteenth century underwent several changes. The minting of pence had virtually ceased in England before 1329 and most of the coinage of the first half of the 1330s was in halfpence and farthings. Because of the shortage of silver reaching the London mint the fineness of the fractions was reduced in 1335 from 11.1 oz silver (0.925) to 10.0 oz (0.833) and the weight of the halfpenny from 11.1 grains to 10.7 grains, enabling a higher mint price to be paid for bullion. This resulted in a substantial output of halfpence and farthings at the lower standard from 1335 onwards, but in 1344 the debased issue was discontinued in favour of a reduction in weight of all denominations which allowed the issue of pence to be resumed. The penny was first reduced from 22.2 grains to 20.3 grains (1344–46) and then to 20 grains (1346–51), with the fractions in proportion.

Of the David II five-point mullet fractions which have been examined, only seven halfpennies and eight farthings are suitable for analysis by weight, being undamaged and of reasonably full flan. These comprise the following from the above lists: halfpennies – Bb, Cb, Dd (both), De, Eg and Fh; farthings – Aa(i), Ab, Ad(ii), Ae, Bb (both), Bf and Cg. The average weights of these specimens are 8.49 grains for the halfpennies and 4.58 grains for the farthings. These seem low if intended to equate to a penny of even 20 grains, but caution should be exercised in view of the equivalent figures given above for halfpence and farthings of Robert I (9.50 and 4.32 grains). These belong to an issue, the pence of which in this study provided an average weight of 21.17 grains (class I) and may well have been struck to a theoretical weight of 22.2 grains. Although the five-point mullet David fractions seem to equate more to the post-1344 English coinage, therefore, the evidence of weight is clearly unreliable on its own.

Also of interest is the form of the letter A used in this issue. Instead of the simple, symmetrical form of the letter, with or without bar, which is used on both the Bruce issues and the six-point mullet coins of David, the halfpennies and farthings of the five-point mullet issue all bear (as far as can be determined) an ornamental A, with a broad, straight, right-hand upright, a thinner, curved left side, and a flat top. This letter closely resembles that which is to be found on some coins of David's post-1358 coinage.¹⁹ Any suggestion that the two issues might be contemporary, however, is undermined by the recognition of the first recorded example of a halfpenny of the post-1358 coinage. (See Appendix B).

It is not entirely clear what all this demonstrates about the date of issue of the five-point mullet fractions. The records show that, following their repossession of Berwick in 1333, the English

¹⁹ I.H. Stewart, *The Scottish Coinage*, as in n. 14, p. 31, fig. 5b.

immediately resumed their coinage there with a series of halfpence and farthings. These show a bear's head, the canting badge of the town, in two quarters of the reverse. If struck at Berwick, therefore, David's halfpence and farthings must date from in or before 1333. The average weight of the coins examined does not, however, rule out the possibility that they may have been struck elsewhere at a later date, either in 1333–5 or even after the English debasement of 1335. It may be noted that the inscriptions on the six-point mullet coins are DAVID DEI GRACIA / REX SCOT(T)ORVM, which might suggest that this issue followed the latest of the five-point mullet coins, on which the same legends appeared at the end of a period of experimentation. In view of the English proclamation of 1356, the six-point mullet issue has been attributed to the early 1350s, and probably to a mint at Edinburgh. Another possible context for the five-point mullet coins might therefore be the period between 1341 and 1346, when David was in Scotland, and in particular from 1343, when most of the invading English had been driven out. The weight and fineness may have been intended to reflect those of either the debased English star-marked halfpennies and farthings or those of the so-called 'Florin' coinage after the weight reduction of 1344. It is worth noting that no example of the David II coinage is known to have been included in the Stanwix, Cumbria, hoard (1986/7), which did include forty-four die duplicate farthings of Edward III's Berwick class VIIIb (c.1333–42) and twelve halfpennies of VIIIa (?1344).²⁰ Coincidentally, however, two David II halfpennies (those listed above as the third Dc specimen and as Fh), first appeared on the London market in May and December 1987 respectively, leading to a suspicion that they may have been strays from the Stanwix hoard. We must therefore leave open the question of the date of issue of the five-point mullet fractions, while bearing in mind the possible alternatives to the traditionally accepted theory.

APPENDIX A: CUT FRACTIONS

Although the practice of producing cut fractions virtually ceased after the introduction of round halfpence and farthings by Alexander III, a few later examples are known – e.g. a half of an Edinburgh penny of the post-1358 coinage (Pl. 6, 1). In the context of this survey it is also apposite to draw attention to one particular halfpenny of David II, listed above as the second specimen with the die combination Fg (Pl. 6, 2). This coin has one quarter missing, apparently cut out along the arms of the reverse cross. It is difficult to see how this could have happened accidentally, and if it resulted from the deliberate division of the coin, it is possible that this was done in order to create an item of low-denomination currency. Clearly this would be most unusual, since even in earlier times when cut halfpennies and farthings were in common usage, a penny with just one quarter removed would be regarded as exceptional. In this particular case, the resulting smaller fraction would have represented one eighth of a penny and presumably could have been accepted only in a private transaction. It is worth noting, however, that very few examples have been found in Scotland of lead and pewter tokens of the types which may have been used for similar purposes in England, and in the absence of such items, it is not impossible that such a transaction could have occurred. Alternatively, the cutting of the coin may have had an entirely non-monetary purpose, such as the provision of keepsakes for two people forced to part, but in such a case a simple halving of the coin would seem more probable.

APPENDIX B: DAVID II EDINBURGH HALFPENNY

This coin, now in Lord Stewartby's collection, was in the second collection formed by F.A. Walters, which was sold by Sotheby on 24–27 October 1932. Walters was one of the leading students and collectors of his time of late mediaeval English coins, and his Scottish series also included many rare and important items. Lot 628, bought by Baldwins for six shillings, was described thus:

David II, Halfpenny, Edinburgh, *obv.* bust to left with sceptre, DAVID * REX * SCOTO; *rev.* VILLA EDINBURGH, cross with mullet in each quarter, *wt.* 7.9 grs., *false, beautifully made*

²⁰ B.J. Cook, *pers. comm.* For dating, see Stewart, as in n. 14, 130.

This coin (Pl. 6, 3) is a miniature version of the early Edinburgh penny of the new coinage of David II from 1358. It corresponds closely to the variety illustrated by Burns as fig. 266, apart from three adjustments required by its size: *Scotorum* is reduced to *Scoto*, there is no saltire after *Villa*, and the mullets have a plain piercing (as on halfgroats) instead of the (larger) form with incuse cinquefoil as used on groats and pence. In our view, and that of the late R.B.K. Stevenson, there is no doubt that this is a genuine halfpenny of the period. The authenticity of significant unique coins has not infrequently been questioned or rejected – prominent examples are the sovereign type groat of Henry VII in the Hunterian Museum and the British Museum's ryal of Henry VIII. The principal argument – indeed, in the case of the David II halfpenny, virtually the only one – against acceptance appears to have been their unfamiliarity.

KEY TO THE PLATES

All coins not otherwise attributed are in the collections of the National Museums of Scotland.

Plate 3

Robert Bruce pennies, Class I

<i>Obv.</i>	1 A.1905.1163	<i>Rev.</i>	A H.C16747 (Burns I, fig. 225)
	2 Stewartby colln. (1)		B British Museum (1906.11–3.4476)
	3 H.C1528		C H.C1534
	4 H.C1530		D Stewartby colln. (1)
	5 K.1997.331		E H.C1528
	6 K.1997.327		F H.C1530
	7 Whitburn hoard 240		G K.1997.331
	8 K.1997.330		H K.1997.327
	9 A.1911.506.1076		J Whitburn hoard 240
	10 H.C1535		K K.1997.330
	11 H.C1529		L A.1911.506.1076
	12 H.C1536		M H.C1535
	13 Stewartby colln. (4)		N H.C1529
	14 H.C4145		O H.C1536
	15 H.C16748 (Burns 2)		P Stewartby colln. (3)
	16 H.C1531		Q H.C4145
	17 Stewartby colln. (6)		R Whitburn hoard 241
			S H.C16748 (Burns 2)
			T K.1997.329
			U H.C4146

Plate 4

Robert Bruce pennies, Classes II and III

<i>Obv.</i>	1 H.C16749 (Burns 3, fig. 226)	<i>Rev.</i>	A British Museum (1914.9–4.187)
	2 British Museum (1914.9–4.187)		B H.C1538
	3 British Museum (1956.10–2.2)		C British Museum (1956.10–2.2)
	4 H.C4147		D Stewartby colln. (8)
	5 Stewartby colln. (8)		

'Robert' imitation

Stewartby collection

Robert Bruce halfpennies, Class I

<i>Obv.</i>	1 H.C16750 (Burns I, fig. 227)	<i>Rev.</i>	A British Museum (Grueber S.23)
	2 Stewartby colln. (2)		B H.C1541
	3 Hunterian Museum, Glasgow, ex Murdoch		C H.C1540
	4 H.C1542		D H.C16751 (Burns I <i>bis</i>)
			E H.C16750 (Burns I, fig. 227)
			F H.C1542

Class IV

H.1996.228

Plate 5*Robert Bruce farthings*

<i>Obv.</i>	1	H.C16752 (Burns 1, fig. 228)	<i>Rev.</i>	A	H.C16752 (Burns 1, fig. 228)
	2	H.C1548		B	British Museum (1903.0607.4)
	3	H.C1544		C	Hunterian Museum, Glasgow (SCBI 35, 325)
	4	Hunterian Museum, Glasgow (SCBI 35, 325)			
	5	Ashmolean Museum, Oxford (SCBI 35, 324)			

David II farthings

<i>Obv.</i>	A	H.C16789 (Burns 1, fig. 249)	<i>Rev.</i>	a	H.C16789 (Burns 1, fig. 249)
	B	British Museum		b	H.C1551
	C	H.C4444		c	Stewartby colln. (2)
				d	Stewartby colln. (3)
				e	Private colln. (Glos. find)
				f	British Museum
				g	H.C4444

Plate 6*David II halfpennies*

<i>Obv.</i>	A	K.1999.256	<i>Rev.</i>	a	K.1999.256
	B	H.C1549		b	Stewartby colln. (1)
	C	Stewartby colln. (1)		c	K.1999.1155
	D	Stewartby colln. (2)		d	Stewartby colln. (3)
	E	Stewartby colln. (4)		e	H.C1550
	F	Stewartby colln. (5)		f	Spink auction 119, 336
				g	Stewartby colln. (4)
				h	Stewartby colln. (5)

Fractions

- 1 Stewartby colln.
- 2 Private colln.
- 3 Stewartby colln.

TWO FOURTEENTH-CENTURY MINT INDENTURES AND RELATED DOCUMENTARY EVIDENCE

MARTIN ALLEN

THE texts of five indentures appointing masters of English ecclesiastical mints have been published. The Durham indentures of 20 September 1489 and 20 January 1495 appeared in Mark Noble's pioneering book on the Durham mint in 1780, and Noble's contemporary George Allan published a version of the Durham indenture of 20 September 1510.¹ In 1908 Caesar Caine published the York indenture of 1 May 1523, which had been summarised by Ruding.² The Canterbury indenture of 16 January 1534 was brought to the attention of numismatists by Henry Symonds, and edited by T.F. Reddaway.³ Christopher Challis has analysed the contents of the five indentures, and provided a revised transcript of the Durham indenture of 1510.⁴ The texts of two important fourteenth-century indentures, which are in French, remain to be published. A York indenture of 18 February 1357 received a brief notice in a history of the archbishops of York published in 1863, followed by later writers without further investigation of the text in the register of Archbishop John Thoresby.⁵ An original copy of a Durham indenture of 2 November 1367 has apparently not been mentioned in print until now.⁶ Texts and translations of the indentures of 1357 and 1367 will be found in the Appendix of this article, with a privy seal writ of 29 June 1353 regulating the operation of franchisal mints.⁷ These documents can significantly increase our understanding of the administration of English ecclesiastical mints in the fourteenth century.

The indenture of 1357 appoints Laurence of Florence as master of the archbishop of York's mint, to make sterlings. The archbishop's mint had been closed after a brief period of activity in 1353,⁸ and its resumption of minting in Pre-Treaty series G may have followed Laurence of Florence's appointment. The archbishop's sterlings were to be minted in his palace in York, which was a collection of buildings in a precinct on the northern side of York Minster.⁹ This is the earliest known reference to the location of the archiepiscopal mint, confirmed by further documentary evidence at various dates from 1374 to 1487.¹⁰ Laurence of Florence was not the only Italian

Acknowledgements I owe a great debt of gratitude to Mr Martin Snape, who brought the Durham indenture of 1367 to my attention, checked the transcripts in the Appendix, and provided the translations. Mr Alan Piper and Lord Stewartby read drafts of this article and offered many valuable comments.

¹ M. Noble, *Two Dissertations upon the Mint and Coins of the Episcopal-Palatines of Durham* (Birmingham, 1780), pp. 87–90; G. Allan, *Collectanea ad statum civilem et ecclesiasticum comitatus Dunelmensis spectantia ex variis codicibus tam manuscriptis quam impressis sine ordine congesta* (Darlington, no date) [unpaginated].

² C. Caine, *The Archiepiscopal Coins of York* (York, 1908), pp. 59–61; R. Ruding, *Annals of the Coinage* (3rd edn, 3 vols, London, 1840), ii, 235–6.

³ H. Symonds, 'The documentary evidence for the English royal coinages of Henry VII and Henry VIII', *BNJ* 10 (1913), 127–71, at p. 149; T.F. Reddaway, 'Two Tudor notes', *BNJ* 34 (1965), 121–5, at pp. 122–4.

⁴ C.E. Challis, 'The ecclesiastical mints of the early Tudor period: their organization and possible dates of closure', *Northern History* 10 (1975), 88–101, at pp. 89–96, 98–100; idem, *The Tudor Coinage* (Manchester, 1978), pp. 26–9.

⁵ BI [Borthwick Institute of Historical Research, University of York] Reg. 11, fols 309^v–309^r; W.H. Dixon, *Fasti Eboracenses: 'Lives' of the Archbishops of York. Vol. I*, edited by J. Raine (London, 1863), p. 459; Caine, *The Archiepiscopal Coins of York*, as in n. 2 p. 39; G. Benson, 'Coins: especially those relating to York', *Transactions of the Yorkshire Philosophical Society* 1913, p. 70.

⁶ DCD [Durham University Library Archives and Special Collections, Muniments of the Dean and Chapter of Durham] Misc. Ch. 6883. M.R. Allen, 'The Durham Mint: The Control, Organization, Profits and Output of an Ecclesiastical Mint' (unpublished Ph.D. thesis, University of Durham, 1999), pp. 171–2 summarises the contents of the indenture.

⁷ PRO [Public Record Office] E 159/176, rec. Hill. rot. 6; BI Reg. 18, fols 309^r–309^v. The text of the writ is part of a series of precedents recorded at the exchequer in 1400, when Archbishop Richard Scrope claimed dies, and the precedents were copied into Archbishop Henry Bowet's register at the time of another claim in 1412. The text is preceded by a writ of 30 June 1353, in Latin, ordering the exchequer to enforce it.

⁸ L.A. Lawrence, 'The coinage of Edward III from 1351', *NC* 6 (1926), 417–69, at pp. 462–3.

⁹ P.M. Tillott, 'The Minster and its precincts', in *A History of Yorkshire: The City of York*, edited by P.M. Tillott (Victoria County History, London, 1961), pp. 337–43, at pp. 340–1.

¹⁰ Caine, *The Archiepiscopal Coins of York*, as in n. 2 p. 71; M. Allen, 'Ecclesiastical mints in fifteenth-century England', *NC* 160 (2000), 249–59, at p. 250.

master of an English ecclesiastical mint in the second half of the fourteenth century. Bonageus of Florence, who may have been a master of the bishop of Durham's mint, took up two landholdings near Durham in 1358, which were forfeited in 1364 after he became a moneyer in Scotland.¹¹ Bonageus may also have worked in the York mint, as he became a freeman of the city in 1363/4. Laurence of Florence was admitted to the freedom of the city in 1360/1.¹² Andrew of Florence, who was described as a moneyer when he was registered as a freeman in 1362/3,¹³ leased the archbishop of York's mint in 1365.¹⁴ On 14 March 1365 Andrew of Florence agreed to farm the mint for two years, paying an annual rent of twenty marks (£13 6s. 8d.). The brief record of this contract in Archbishop Thoresby's register refers to an indenture, the archbishop's copy of which was kept by his treasurer, but unfortunately the text of this indenture was not registered. Andrew of Florence was one of the two joint masters of the Durham mint named by the surviving indenture of 1367, and it is possible that he also renewed his lease of the York mint in 1367, at the end of his two-year contract. In May 1388 an inquisition examining the assets of Archbishop Alexander Neville found that the mint had been leased for a year from Christmas 1387 by Andrew Monymaker, who may have been the same man as Andrew of Florence.¹⁵ Andrew of Florence's partner in the Durham mint, John of Bishopdale, was a local man described as a burgess and citizen of Durham in the indenture of 1367. John of Bishopdale was the bailiff of the city of Durham in 1370, and he later became a collector of customs, mayor and MP of Newcastle upon Tyne.¹⁶

Andrew of Florence and John of Bishopdale leased the Durham mint for one year from Martinmas (11 November) 1367, agreeing to pay an annual rent of £4 at the four major terms of the bishopric of Durham, presumably in four equal instalments. The four major terms were the Feast of St Cuthbert in March (20 March), the Nativity of St John the Baptist (24 June), the Translation of St Cuthbert (4 September), and Martinmas.¹⁷ Martinmas was the normal end of accounting years in the bishopric until the late 1370s or the early 1380s, when Michaelmas (29 September) was adopted for most purposes.¹⁸ The record of the lease of the York mint in 1365 does not provide any indication of the accounting year, but during a vacancy of the archbishopric of York in 1373–4 rent was received from the mint for the Martinmas term of 1373, implying an annual rent, probably halved at Martinmas in November and Pentecost in May.¹⁹ However, the 1387/8 rent year of the mint began at Christmas. The surviving evidence suggests that the archbishop of York's mint was customarily leased for an annual rent from no later than 1365, but the indenture of 1357 expects Laurence of Florence to pay seignorage to the archbishop. The Durham mint also provided seignorage instead of rent at various times in the thirteenth and fifteenth centuries.²⁰ The Durham and York indentures require the mint-masters to pay all necessary costs, and the York indenture specifically mentions the cost of dies, sent to London for replacement under the archbishop's seal.

¹¹ *Halmota Prioratus Dunelmensis ... AD 1296–AD 1384*, edited by J. Booth (Surtees Soc. 82, Durham, 1889), pp. 21–2, 28–9; Allen, 'The Durham Mint', as in n. 6 pp. 56–7, 170–1.

¹² *Register of the Freemen of the City of York from the City Records. Vol. I: 1272–1558*, edited by F. Collins (Surtees Soc. 96, Durham, 1896), pp. 11–12, 54, 57.

¹³ *Register of the Freemen of the City of York*, as in n. 12 p. 56.

¹⁴ BI Reg. 11, fol. 322; *Fasti Eboracenses*, p. 462; Caine, *The Archiepiscopal Coins of York*, as in n. 2 p. 39; Benson, 'Coins: especially those relating to York', as in n. 5 p. 70.

¹⁵ *Calendar of Inquisitions Miscellaneous (Chancery) Vol. V 1387–1393* (London, 1962), p. 74. Andrew Monymaker owed an annual rent of 24 marks (£16) for the mint, and 8s. for the 'foregarth' of the archbishop's palace.

¹⁶ R. Surtees, *The History and Antiquities of the County Palatine of Durham* (4 vols, London, 1816–40), iv (part 2), 17; A. Steel, 'The collectors of the customs at Newcastle upon Tyne in the reign of Richard II', in *Studies Presented to Sir Hilary Jenkinson*, edited by J.C. Davies (London, 1957), pp. 390–413, at pp. 395–7, 401; Allen, 'The Durham mint', as in n. 6 p. 58.

¹⁷ G.T. Lapsley, *The County Palatine of Durham* (Harvard Historical Studies, London, 1900), pp. 264–5.

¹⁸ Allen, 'The Durham Mint', as in n. 6 pp. 73–4, 83.

¹⁹ PRO SC 6/1144/10, rot. 8 (particulars of account of Henry de Barton and John Harnesthorp, keepers of the archbishopric of York, 5 November–6 May 1374); R. Davies, 'Notices of the York mint and coinages', *Proceedings of the Yorkshire Philosophical Society* 1847–54 (1855), 191–269, at p. 252; Caine, *The Archiepiscopal Coins of York*, as in n. 2 p. 71; Benson, 'Coins: especially those relating to York', as in n. 5 p. 70. The keepers received 100s. rent for the Martinmas term of 1373. In 1374 Pentecost was on 21 May, fifteen days after the end of the account.

²⁰ Allen, 'The Durham Mint', as in n. 6 pp. 71–3.

Both of the indentures specify the use of Tower standards of weight and fineness. The Durham indenture implies that this is to be enforced by a pyx trial, as the bishop's officials are to take and keep pyx samples of the coins minted (*lassay del monoi overi*). The York indenture forbids the use of silver from old English coins. The origin of this unusual prohibition seems to have been the privy seal writ of 29 June 1353, in French, which stipulated conditions to be attached to minting rights claimed by certain lords (*ascuns seignurs*). The archbishop of Canterbury had obtained a confirmation of his minting rights on 4 December 1352,²¹ and the archbishop of York's claim was conceded on 2 May 1353.²² The writ forbids the melting of sterling money to make coins, implying that this would adversely affect the king's profit from this source in his own mints. Minting silver derived from the melting of relatively heavy old coins had been made profitable by the reduction of the weight standards in 1351. The writ further restricted competition with royal mints by prohibiting lower minting charges, specifying the 14d. per pound by weight charged for the minting of pence in the king's mints from 1346 to 1355.²³ The York indenture seems to be obeying this prohibition in its adherence to the Tower charges for the minting of pence. The writ's stipulation that mints should not be farmed, except to the king or by his permission, shows an awareness of the potential profits of mint farmers after the weight reductions of 1351. The Durham indenture displays a similar awareness in the provision that it should be cancelled, allowing the bishop to take his own profit, if the coinage is changed.

The York indenture states that Thomas of Duffield and John Frebois will stand as pledges, to guarantee the performance of the contract and to indemnify the archbishop. Thomas and John are described as citizens and merchants of York, and they may have been business associates of the new mint-master, Laurence of Florence. The indenture was sealed on 18 February 1357, and two days later the two guarantors agreed to a bond promising to pay £100 to the archbishop at Easter (9 April).²⁴ On 22 February 1357 Thomas and John sealed an indenture between themselves and the archbishop, completing the formalities required.²⁵ This indenture states that Laurence has been appointed by indenture, to make sterlings in the archbishop's palace, and that Thomas and John are bound as pledges. Their bond will be null and void if Laurence keeps his agreement. The Durham indenture merely states that the two mint-masters are bound by all of their goods for the performance of the contract, and there is no reference to pledges.²⁶

²¹ *Calendar of Charter Rolls 1341–1417*, p. 126.

²² *Calendar of Close Rolls 1349–1354*, p. 358; Caine, *The Archiepiscopal Coins of York*, as in n. 2, p. 32.

²³ *A New History of the Royal Mint*, edited by C.E. Challis (Cambridge, 1992), pp. 701–4 summarises the royal mint indentures of 1346–55. In 1351 the yield of a 'Tower pound of silver minted into pence was increased by 30d. to 25s., including 17½d. (14d. by weight) deducted for minting charges. Mint customers would have received a net profit of 12½d. (10d. by weight) from the reminting of full-weight pence struck before the weight reduction of 1351. The reminting of halfpence and farthings was less likely to be profitable, as they had been struck at lighter standards since 1346 (23s. 3d. for halfpence and 23s. 5d. for farthings).

²⁴ BI Reg. 11, fol. 309v.

²⁵ *Ibid.*

²⁶ The Durham indentures of 1489, 1495 and 1510 include pledges.

APPENDIX

In the following transcripts abbreviations and contractions have been silently expanded when their meaning is unambiguous, and punctuation has been modernised.

Privy seal writ of 29 June 1353

Text

[Collation of two texts:

A: PRO E159/176, rec. Hill. rot. 6

B: BI Reg. 18, fols 309^r–309^v.]

Edward par la grace de Dieu roy Dengleterre et de France et seigneur Dirland a noz chaunceller et tresorer saluz. Pur ceo que ascuns seignurs Dengleterre par chartres de noz progenitours et de nous cleymment davoit coignes pur faire monoie et davoit le profit dycelle²⁷ et par celle cause oint pursue devers nostre conseil²⁸ a ceo que nous avons entenduz, nous, voillantz qe resoun soit fait sibien a nous come as ditz seignurs en celle²⁹ partie, avoms fait debatre devant nous la dit busoigne et sur ceo vous declarons nostre entenciuon et volonte en la manere que³⁰ sensuit. Primes volons qe les seignurs qui deivant avoir tielx coignes par resoun les eient desore et qils puissent faire esterlynges de plate sicome faire soleient³¹ et deivent resonablement sanz³² faire founder lesterlyng. Et qils ne facent autre monoie que le petit esterlyng et qils ne doignent plus³³ grantz gages as moneours qe nous ne fesoms et que nul de eux ne preigne pur lour seignurage de la monoie meyns que nous ne perons cestassavoir qatorze³⁴ deniers de poys a la livre de poys pur overage et toutz autres choses.³⁵ Et que nul de eux ne lesse les profitz de sa monoie a ferme si noun a nous ou par nostre assent. Et si nulles veilles³⁶ esterlynges soient foundez en plate en deceite ou destourbanche de nostre profit par nul³⁷ des ditz seignurs ou par les maistres de lour monoies³⁸ ou nul³⁹ autre marchaunt en purpos de faire mesme la plate monoie novel, soit la dite plate forfaita⁴⁰ a nous et ceux qui laveront fait soient puniz a nostre volente.⁴¹ [B: fol. 309^v] Et que nul lumbard nautre qad este ou serra trove en defaut⁴² en ascune moignage en engeterre soit retenuz ove⁴³ nuls des⁴⁴ seignurs pur lour moignages⁴⁵ suisdictes. Et que nous eons nous serches par touz⁴⁶ les lieux en fraunches as totes⁴⁷ les foitz⁴⁸ qe plerra a nous et a nostre conseil. Si vous mandons et chargeons que les pointz et articles susditz⁴⁹ facez tener et garder desore sanz⁵⁰ ceo que rienz ysoit fait ou attempte al encountre. Don' souz nostre prive seal a Westm' le xxix jour de juyn lan de nostre regne Dengleterre vynt et septisme et de Fraunce quatorzisme.

Translation

Edward by the grace of God king of England and of France and lord of Ireland to our chancellor and treasurer, greeting. Whereas certain lords of England by charters of our progenitors and ourselves claim to have dies for the making of money and to have the profit thereof, and for this cause have, as we have heard, made suit to our council, we, willing that right be done both to us and to the said lords in this regard, have caused the said matter to be discussed before us, and thereupon declare to you our intention and will in the manner

²⁷ B: *dicelle*.

²⁸ B: *counseill*.

²⁹ B: *cele*.

³⁰ B: *qe*.

³¹ B: *soloient*.

³² B: *saunz*.

³³ B: *pluis*.

³⁴ B: *quatorze*.

³⁵ B: *choses*.

³⁶ B: *veillez*.

³⁷ B: *nulle*.

³⁸ B: *monoie*.

³⁹ B: *nulle*.

⁴⁰ B: *forfait*.

⁴¹ B: *volunte*.

⁴² B: *defaute*.

⁴³ B: *ov*.

⁴⁴ B: *des*.

⁴⁵ B: *moignage*.

⁴⁶ B: *toutz*.

⁴⁷ B: *touz*.

⁴⁸ A, dorset: *Adhuc de processu tangente archiepiscopum Ebor' de cuneis liberandis*.

⁴⁹ B: *suisditz*.

⁵⁰ B: *saunz*.

following. First, we will that the lords who rightly should have such dies shall have them henceforth, and that they may make sterlings of plate as they have been accustomed and ought rightly to do, without having sterling [money] melted. And that they make no other money than sterlings and they give no greater wages to the moneyers than we do, and that none of them take as their seignorage of the money less than we take, that is to say fourteen pence by weight to the pound by weight, for striking and all other things. And that none of them let the profits of his money to farm if not to us or by our assent. And if any old sterlings are molten into plate in deceit or disturbance of our profit by any of the said lords or by the masters of their money or any other merchant for the purpose of making the same plate [into] new money, let the said plate be forfeit to us and those who have done so be punished at our will. And that no Lombard or other who has been or shall be found in default in any mint in England be retained with any of the said lords for their mints. And that we have our searches in all places within franchises at all times that it shall please us and our council. So we command and charge you that you cause the aforesaid points and articles to be held and kept henceforth, without anything being done or attempted to the contrary. Given under our privy seal at Westminster the twenty-ninth day of June the twenty-seventh year of our reign in England and the fourteenth in France [29 June 1353].

Indenture of 18 February 1357

Text

[BI Reg. 11, fols 309^r–309^v]

[*Latin*:] Indentura facta inter dominum et Laurencium de Florencia super pactione de faciendis sterlingorum in palacio Ebor^a.

[*French*:] Ceste endenture faite par entre L'onorable piere en dieu sire Johan par la grace de dieu ercevesque Deverwik et primat Dengleterre dune part et Laurence de Florence del autre tesmoigne que le dit ercevesque ad graunte et depute le dit Laurence maistre de faire le petit esterling⁵¹ en son palays deinz le citee Deverwyk de tiel pois et de tiel alaye come il fount en la Tour de Loundres de plate saunz foundre lesterling. Et aussint le dit Laurence prendra pur lercevesque susdit pur lui et ses oeverours et rendra as marchauntz en mesme la manour come il fount a Loundres pur loveraigne del petit esterling⁵¹. Et les coignes serront envoiees a Loundres a tant foitz come mestre serra a les coustages le dit Laurence de souz le seal le dit ercevesque. Et le dit Laurence trovera toutes autres maneres des coustages autour loveraigne susdit. Et a ses covenantes loialment tenir et parfournir et a paier au dit ercevesque et as marchauntz et overours bien et loialment solom ceo qil fount a Loundres le dit Laurence ad trove plegges. Cest assavoir Thomas de Duffeld et Johan Frebois Marchauntz et citezeins [fol. 309^v] Deverwyk et de sauver le dit ercevesque saunz damage. En tesmoignance de quele chose as cestes endentures si bien le dit ercevesque come le dit Laurence entrechaungeablement oumt mis lour seals.

Don^t a Cawode le xvij jour de feverer lan de nostre Seigneur mcccclvj^{me}.

Faite a remembre que lune partie de ceste endenture remente devers le dit Laurence seale du seal le dit ercevesque leutre partie rement devers le dit ercevesque seale du seal⁵¹ le dit Laurence.

Translation

Indenture made between the lord [archbishop] and Laurence of Florence about an agreement concerning the making of sterlings in the [archiepiscopal] palace of York.

This indenture made between the honourable father in God lord John by the grace of God archbishop of York and primate of England of the one part, and Laurence of Florence of the other, witnesses that the said archbishop has granted and deputed the said Laurence [to be] master for making sterlings in his palace within the city of York, of such weight and of such fineness as is minted in the Tower of London, of plate without melting sterling [money]. And also the said Laurence will take [charges] for the aforesaid archbishop, for himself and [for] his workmen, and will render to merchants, in the same manner as is done in London for the making of sterlings. And the dies will be sent to London as many times as shall be necessary, at the expense of the said Laurence, under the seal of the said archbishop. And the said Laurence will find all other manner of expenses concerning the aforesaid work. And the said Laurence has found pledges, that is to say, Thomas of Duffield and John Frebois, merchants and citizens of York, for the loyal keeping and performance of his covenants, and for good and loyal payment to the archbishop and to merchants and workmen in accordance with the practice in London; also, for the saving of the archbishop without damage. In witness whereof both the said archbishop and the said Laurence have interchangeably set their seals to these indentures.

⁵¹ *du seal* inserted.

Given at Cawood the eighteenth day of February the year of our Lord 1356 [18 February 1356/7].

Be it remembered that one part of this indenture remains with the said Laurence sealed with the seal of the said archbishop; the other part remains with the said archbishop sealed with the seal of the said Laurence.

Indenture of 2 November 1367

Text

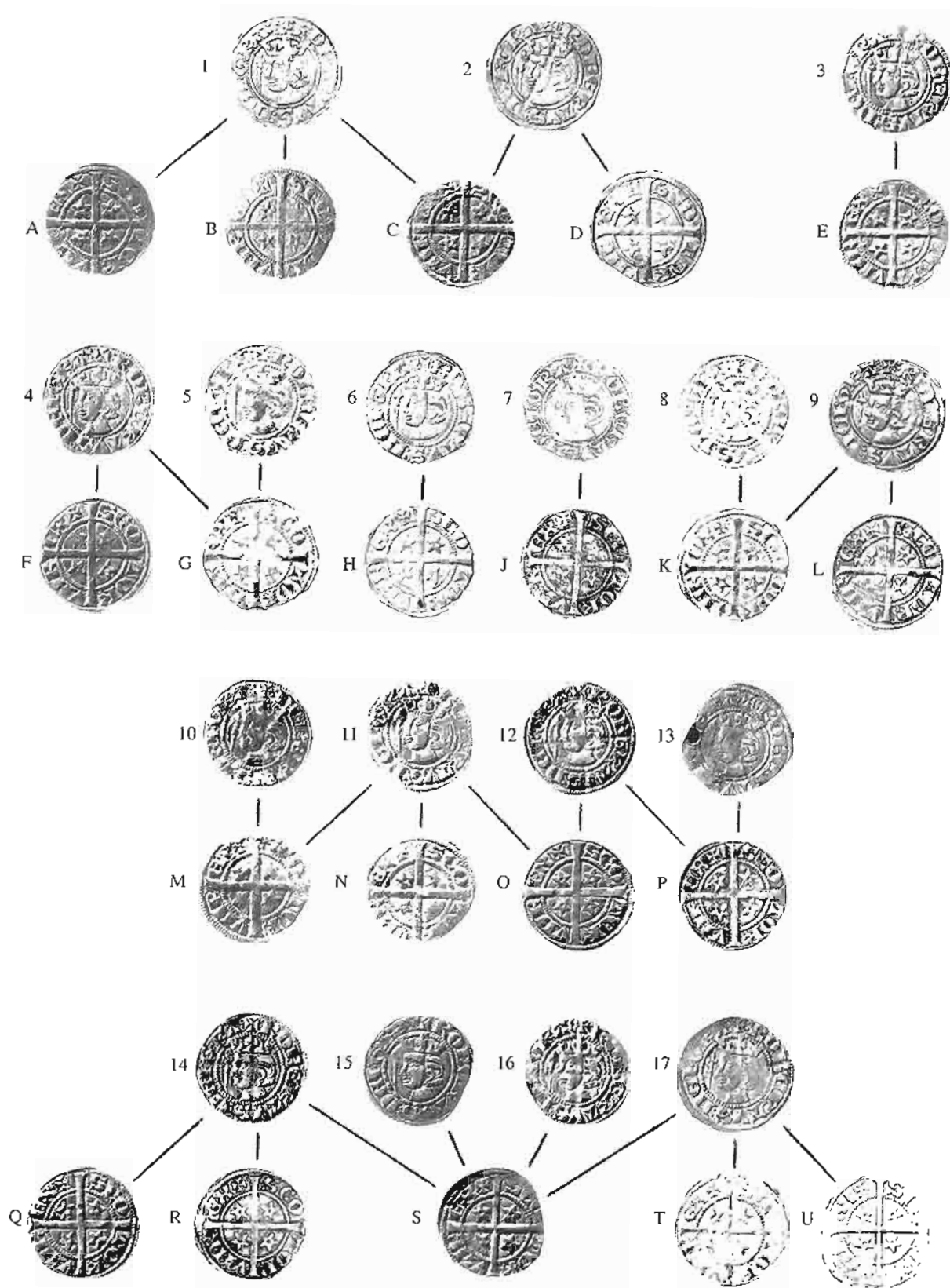
[DCD Misc. Ch. 6883]

Ceste endentur fait a Duresme le second jour de novembre lan de grace mile trois centz seissant septisme entre le treshonorable pier en dieu Thomas par la grace de Dieu evesque de Duresme dun part et Andre de Florence moneour et Johan de Bishopdale burgeys et citezeins de Duresme dautre part tesmoigne que le dit evesque ad lesse au dit Andre et Johan soun moneage de Duresme ove touz les profits dues et acustumez. A havoir et tenir as dtz Andre et Johan et lours deputez de dit eveske de la feste de Seint Martyn proschein avenir par un an entier adonques proschein ensuiant pleinement acompli. Rendant au dit evesque a soun eschequer de Duresme as qatre termes usueles deinz levesque de Duresme qatre livers desterlinges le primer terme comenceant a la feste de Seint Cuthbert en marce prochein avenir issint que le dit Andre et Johan facent touz les coustages du dit moneage et des coyennes et quanque a le dit moneage appartient durant le terme suisdit. Et feront tout⁵² le monoy que serra overi el dit moneage demesmes lalay et poise come les moneours nostre seigneur le roi fount a Loundres et acquiteront et defenderont le dit evesque de damage et empechement envers le roi et touz autres que ceste busoygne purra toucher. Estre ce les avauntiditz Andre et Johan grauntont que en cas qeschange de monoy se taille en roialme deinz le terme suisdit qadonques celle lesse soit tenuz par nulle mais bien luise adonques au dit evesque faire soun profite del dit moneage a soun pleisire nient contrestant ceste endentur. Et le dit evesque par ses ministres prendra et gardera lassay del monoi overi de temps en temps solont le maner use en le moneage nostre seigneur le roi a Loundres et ail-liours en le roialme. As queles covenantz touz et chescuns par soi loiament tenir cest assavoir paiement de rent overage et faiture de monoy et des coustages appartenant et dacquiter levesque de damage et empechement en le maner suisdit lez avauntiditz Andre et Johan obligeont soi jointement et severalement lours heirs et lours executours et touz lours biens par ceste escript endentez entrechaungeablement enseallez des sealx as parties suisditz.

Translation

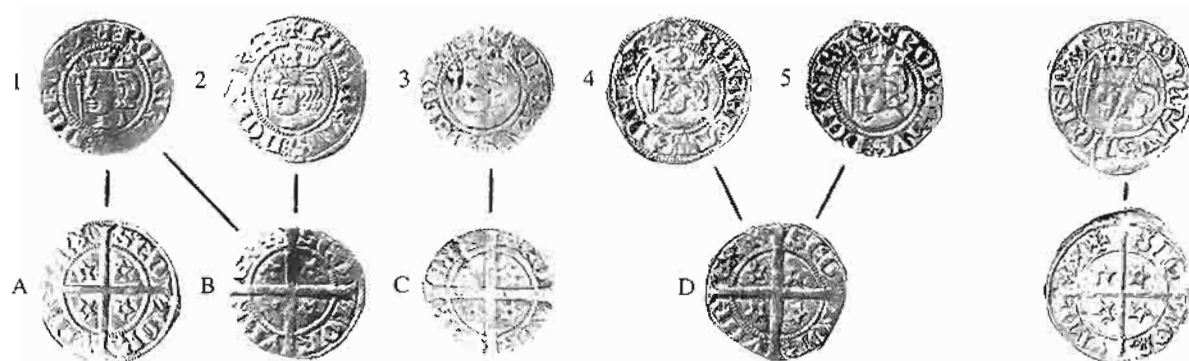
This indenture made at Durham the second day of November the year of grace one thousand three hundred and sixty seven between the right honourable father in God Thomas by the grace of God bishop of Durham of the one part, and Andrew of Florence moneyer and John of Bishopdale burgess and citizen of Durham of the other part, witnesses that the said bishop has leased to the said Andrew and John his mint of Durham, with all the profits, dues and customs: to have and to hold to the said Andrew and John and their deputies, of the said bishop, from the feast of St Martin next coming [11 November 1367] for a whole year then following, fully accomplished; rendering to the said bishop at his exchequer of Durham at the four terms usual within the bishopric of Durham four pounds sterling, the first term commencing at the feast of St Cuthbert in March next coming [20 March 1368], so that the said Andrew and John bear all the costs of the said mint and of the coinage and whatsoever appertains to the said mint during the aforesaid term. And they shall make all the money to be struck at the said mint of the same fineness and weight as the moneyers of our lord the king do at London, and they shall discharge and defend the said bishop from damage and impeachment as regards the king and all others whom this business could affect. Moreover the aforesaid Andrew and John warrant that if the coinage changes in the realm during the aforesaid term then this lease will be held as null, but it will then be properly permitted for the bishop to make his profit of the said mint at his pleasure notwithstanding this indenture. And the said bishop by his ministers shall take and keep the assay of the money struck, from time to time, according to the manner used in the mint of our lord the king at London and elsewhere in the realm. To the loyal keeping of all and each one of which covenants, that is to say payment of rent, striking and making of money and the costs appertaining, and discharge of the bishop as to damage and impeachment in the aforesaid manner, the aforesaid Andrew and John bind themselves, jointly and severally, their heirs and their executors and all their goods, by this indented writing interchangeably sealed with the seals of the aforesaid parties.

⁵² *tout* inserted.



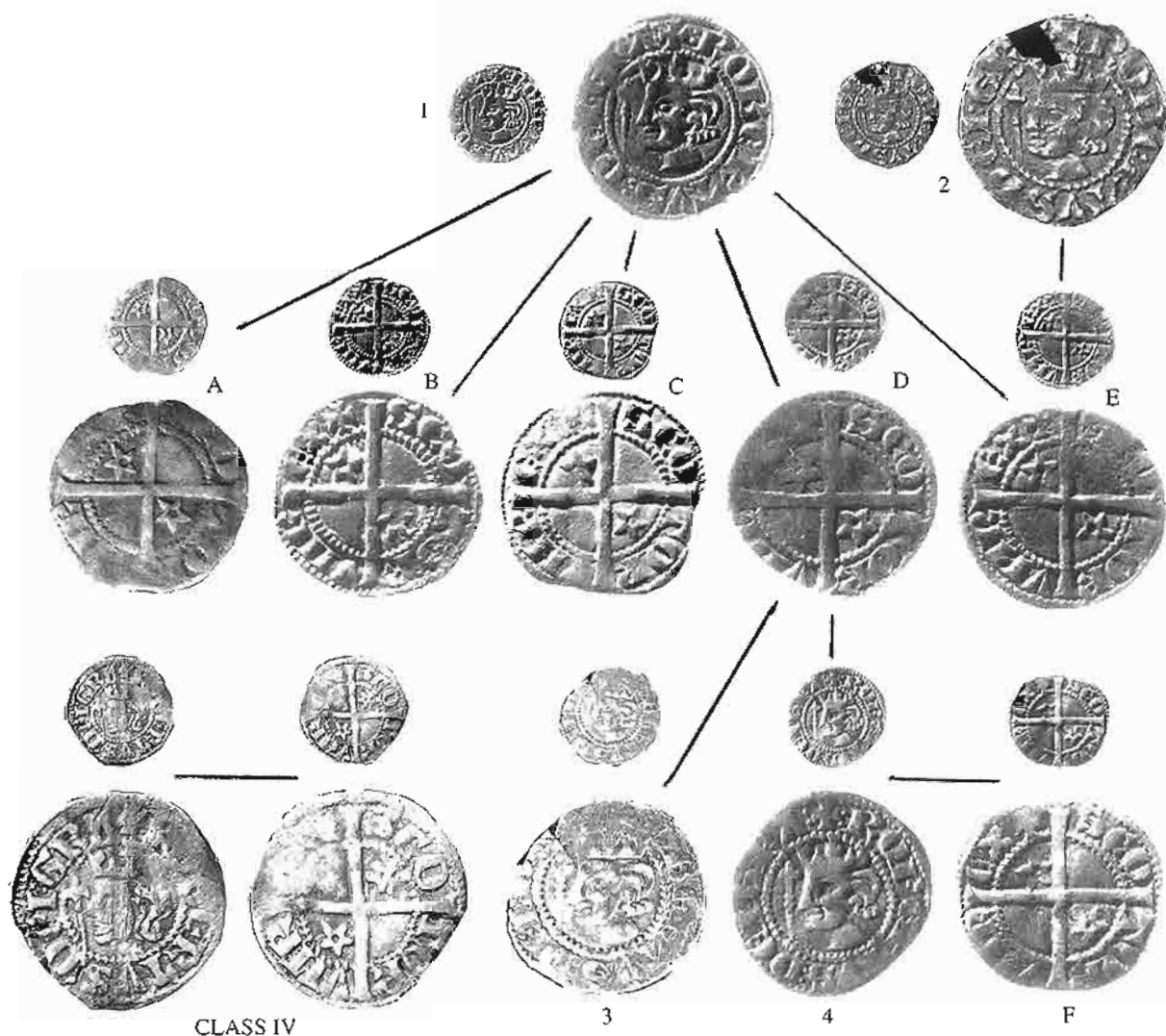
ROBERT BRUCE PENNIES – CLASS I

PLATE 4



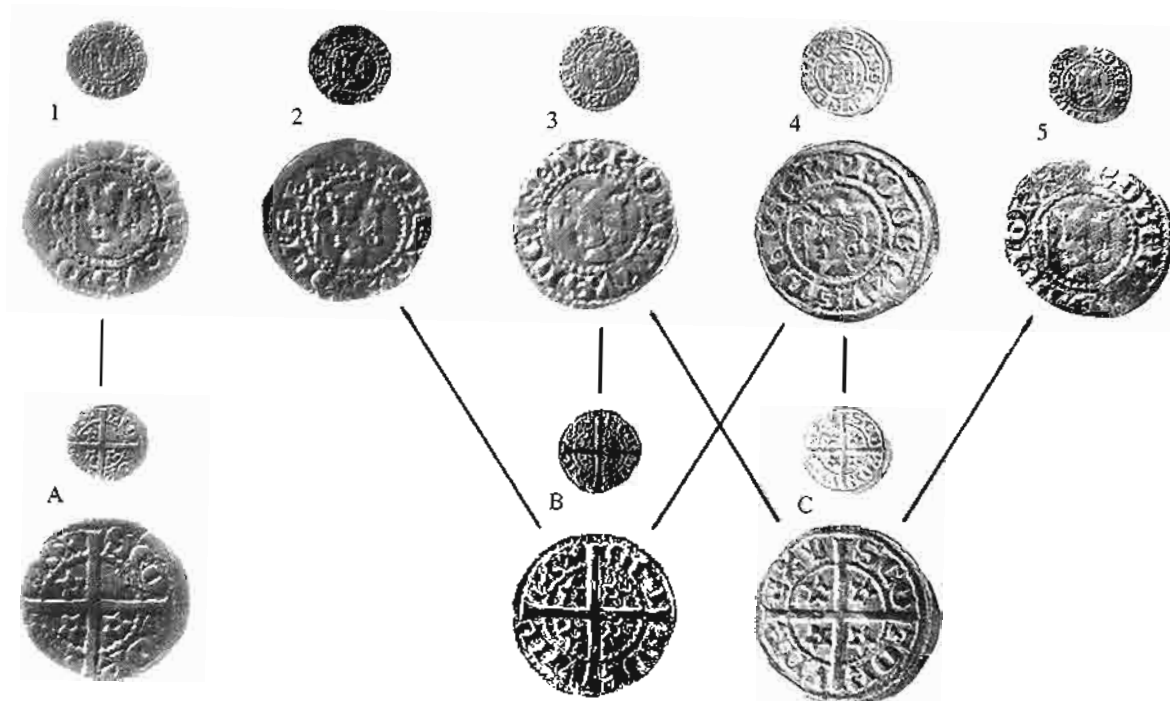
ROBERT BRUCE PENNIES – CLASSES II AND III

IMITATION

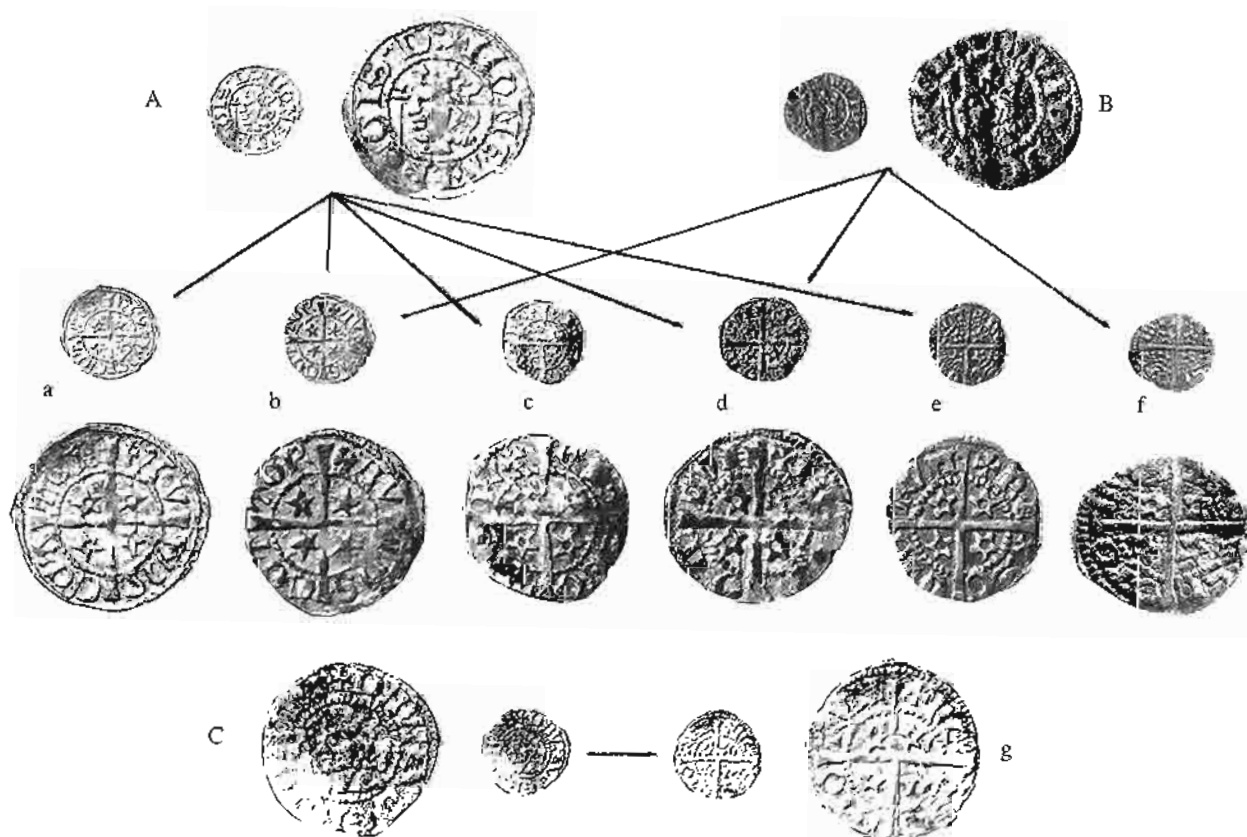


CLASS IV

ROBERT BRUCE HALFPENNIES

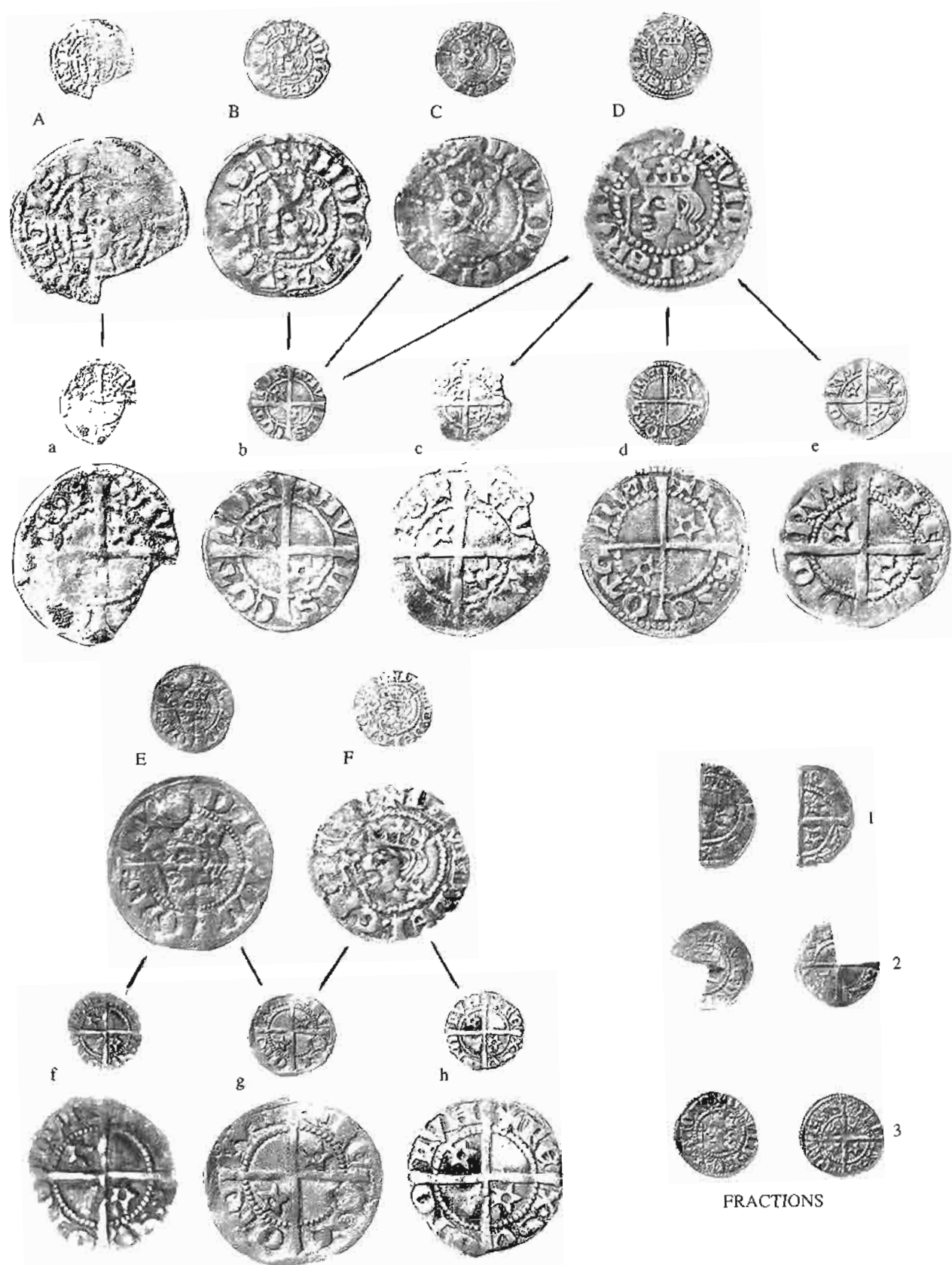


ROBERT BRUCE FARTHING



DAVID II FARTHING

PLATE 6



DAVID II HALF PENCE
HOLMES AND STEWARTBY: SCOTTISH COINAGE (4)

THE MISTERY OF COINERS AND THE KING'S MONEYPERS OF THE TOWER OF LONDON, c.1340–c.1530¹

JESSICA FREEMAN

THE moneyers of the Tower of London, although perhaps amongst the most important group of men at the Mint, since it was they who fashioned the blanks and struck the coins, are also amongst the most obscure. Moneyers were not paid directly by the Crown, but were responsible to the master-worker (a royal appointment) through their chosen representative, the provost of their own company of Moneyers, by whom they were organised and from whom they received their wages.² Thus moneyers seldom appear in official Tower records, and their own company archives have not survived before the later sixteenth century. It is only through other sources, such as wills, enrolled deeds, and, in particular, Exchequer records – which noted the exemption of moneyers from payment of the subsidy – that a partial listing can be attempted.³

Certain details regarding the Moneyers' company can be gleaned from the evidence given before the 1848 Royal Commission into the Constitution, Management and Expense of the Royal Mint. This found that the moneyers of the Tower were not appointed by any public authority but formed a body – the company of Moneyers – perpetuated by self-election, which assumed possession of legal corporate rights, and claimed the exclusive privilege of the work of converting the bullion, as received from the melting, into coin. Yet the commissioners noted that the company was unable to produce any charter or grant of corporation either then or at the 1696 inquiry into Miscarriages of the Officers of the Mint.⁴ The seal used by the company in 1848 was engraved from an old seal, still in existence, which bore an image purporting to be that of Edward I; one of the company's officials said that since this seal had been handed down within the company 'by their ancestors, its antiquity was presumed'. However, the Commission thought that the seal was more likely to be that of Edward IV, for it was in 1462 that this king had formally incorporated all mint personnel, including the moneyers, into one body, the Mint Corporation.⁵ The Moneyers' company may well have acquired a past seal of this Corporation and subsequently claimed it as their own.

The organisation of the Moneyers' company is in fact known only from 1578, when their rules and regulations were 'newly written and set forth' by the then Provost.⁶ Internal evidence does, however, suggest that these ordinances incorporated earlier material. They dealt, amongst other items, with the taking on of apprentices, the election of the provost by the fellows and his powers of enforcement, the structure of the monthly meeting when the reckoning was made and the 'faulting bill' read, and the good behaviour of the moneyers in respect of their craft and towards each other, particularly the elders of the company. Financial assistance was available to a moneyer if he

¹ I am grateful, to Professor Caroline Barron for her advice and assistance in the preparation of this article, and to Dr Martin Allen and Dr Christopher Challis for commenting on earlier drafts.

² Until 1544 the Crown was to experience continual difficulty in making viable contracts with master-workers and various different groups were approached, including Italian merchants and London citizens, particularly the goldsmiths; by 1361, for example, there had been twelve different agreements in seventeen years, T.F. Reddaway, 'The King's Mint and Exchange in London 1343–1543', *English Historical Review* 82 (1967), 2–18.

³ See Appendix. This listing is organised in a similar way to those of C.E. Challis, 'Mint Officials and Moneyers of the Tudor Period', *BNJ* 45 (1975), 72–6, and 'Mint Officials and Moneyers of the Stuart Period', *BNJ* 52 (1989), 157–97.

⁴ Parliamentary Papers, Royal Commission 1848, *Reports from Commissioners*, xxviii (1849), Pt. 2, Report: p. vi (no. 15), pp. vii–viii (no. 31), Abstract, pp. 52–3; R. Ruding, *Annals of the Coinage of Great Britain and its Dependencies*, 3 vols (3rd ed., London 1840) ii, 466.

⁵ *Reports from Commissioners*, xxviii (1849) p. 237, Qns. 1429–30; Abstract: p. 56; *Calendar of Charter Rolls, 1427–1516*, 143–4.

⁶ *Reports from Commissioners*, xxviii (1849) Pt. 2, pp. 145–6, Qn. 266. This is a summary of All Souls College, Oxford, MS 261, Pt. 2, 49–51.

was ill and, if he died in poverty, the company was prepared to help in whole or in part with his burial costs. These ordinances are similar to those found in the religious and craft fraternity returns of 1388, such as the London cutlers, although naturally enough there is no mention of the provision of candles for the fraternity light, nor the attendance of brethren at requiem masses.⁷

The 1848 Royal Commission concluded that although early in the reign of Edward IV the journeyman-workers, who refined and prepared the blank ingots, and the moneyers, who hammered up the impression, had amalgamated their two spheres of expertise to become known simply as moneyers, the Moneyers' company itself probably did not exist until the mid-sixteenth century. However, the commissioners did concede that an indenture of 1465, which provided for the first time that the Mint Master should have 6d. per pound of gold, 'for the moneyers, for wages and waste' might imply an existing association of these workers.⁸ This latter statement was in fact correct, for in September 1457 John Aleyn of Shoreditch in his will, in which he describes himself as 'coynour', leaves 6s. 8d. to '*communi pixidis mistere mee de conours*', 'the common box of my craft of coiners'.⁹ The company or guild will thus have been in existence long enough to establish a fund for the benefit of members.¹⁰

John Aleyn also bequeathed 6s. 8d. to the fraternity of the Blessed Virgin Mary in his parish of St Leonard Shoreditch, as did six other coiners out of the sixteen who left extant wills c.1370–c.1545, that is 44%. The earliest recorded coiner was John Clopton, moneyer, who bequeathed this brotherhood 3s. 4d. in 1377, and the latest, Richard Harryonge, Provost of the company of Moneyers, 6s. 8d. in 1545.¹¹ In the late medieval period almost every trade gild had at its centre devotion to a particular saint and in London many craft associations developed from an existing parish or neighbourhood fraternity.¹² Since the great majority of moneyers came to live either within or near the parish of St Leonard, it seems likely that the roots of the Moneyers' company lie in a more exclusive craft fellowship which grew up under the umbrella of this parish gild of Our Lady. Out of a total of fifty-seven Shoreditch wills examined, only a further six parishioners, including the vicar and a brewer, William Smyth, made a testamentary bequest to this gild, reinforcing the suggestion of a particular link between the fraternity of Our Lady and the Moneyers' company. Among the benefits of Our Lady's gild was the provision of a fitting funeral; so in 1443 John Brynhton, yeoman of London, requested that his burial service at St Leonard's be conducted in the same form as was usual for a deceased brother of the fraternity of Our Lady in the same church.¹³ The fraternity still flourished at the Reformation, co-existing in the parish with a brotherhood in honour of St Christopher and St James known in 1500, although an earlier gild, active in 1364 and dedicated to the Rood, had disappeared.¹⁴

The parish of St Leonard Shoreditch, Middlesex, lay about a mile from the Tower of London, travelling northwards along Bishopsgate and passing by the hospital of St Mary Spital without Bishopsgate and the convent of St John the Baptist, Haliwell, both major landowners in the parish as were the Dean and Chapter of St Paul's and the bishop of London. As elsewhere, tensions often arose between landlord and tenant, and in the latter end of the fourteenth century the records of the King's Bench reveal various episodes in a quarrel between the prior of St Mary Spital and John Yerald, William Avery and other men of Shoreditch.¹⁵

⁷ H.F. Westlake, *The Parish Gilds of Medieval England* (London, 1919), pp. 188, 236–7.

⁸ *Report from Commissioners*, xxviii (1849), Pt. 2, Report: pp. 19, 3 & 54.

⁹ Guildhall Library, London, Commissary Court of London Wills: MS 9171/5 f. 28v. Aleyn left a son William, of whom there is no further record, whilst his wife Johanna, the widow of Nicholas Wightmore, had predeceased him. Aleyn's executors were John Rawlyn, chapman and John Harryonge, coiner. Aleyn should not be confused with John Aleyn, warden of the Goldsmiths' Company, fl.1487.

¹⁰ Craig says that the moneyers had formed themselves into a fraternity by at least 1445, but gives no reference for this statement. J.H.C. Craig, *The Mint. A History of the London Mint from AD 287–1948* (Cambridge, 1953), p. 90.

¹¹ GL: MS 9171/1 f.48; PRO: PROB 11/30 f. 263. The others were Robert Harryonge, William, Richard and Robert Hart and John Hill.

¹² C.M. Barron, 'The Parish Fraternities of Medieval London', in C.M. Barron & C. Harper-Bill, eds, *The Church in Pre-Reformation Society* (Woodbridge, 1985), pp. 14–17.

¹³ GL: MS 9051/1 f.29v (Richard Bowmerssh, 1395) MS 9171/6 f.245v (William Smyth, 1479) & /4 f.127.

¹⁴ *Survey of London*, vol. viii, *The Parish of St Leonard Shoreditch*, edited by G.T. Forrest (London, 1922), 94; PRO: PROB 11/12 f.131v. There was a light to St Christopher in the church in 1453, whilst Richard Dey in 1373 left 3s. 4d. to the light of an unnamed fraternity, probably either that of Our Lady or the Rood, GL: MS 9171/5 f.125 & /1 f.4v.

¹⁵ R.W. Chambers and M. Daunt, *A Book of London English 1384–1425* (Oxford, 1931), 277. John Yerald died in 1405, GL: MS 9051/1 f.157.

Shoreditch, with 800 communicants in 1548, was still surrounded by fields in the fifteenth century, but by the sixteenth century London was spreading inexorably outwards.¹⁶ There was considerable occupational diversity: carpenters, brewers, butchers, smiths and bakers are recorded, although the coiners are likely to have been the dominant craft. London citizens often held land in the parish, such as John Northampton, the prominent London draper and controversial mayor of London in the reign of Richard II, and Piers Atherton, mercer, who directed in his 1467 will that Thomas Sharpe, 'coynour' of Shoreditch was to be the preferred purchaser of 'my place that I dwell in'.¹⁷ John Gadde, shearman (died 1487) whose brass adorned the old church, and Richard Churchman, brewer, who appears as witness, feoffee and executor for several moneyers, were both Parliamentary attestors. Gadde may also have been the householder of Halywell Street, just beyond Temple Bar, who employed an alien servant, John Flemyng, in 1484.¹⁸ Gadde's son, Richard, citizen, shearman and merchant, was one of the sureties for John Shaa and Bartholomew Reed, on their appointment as master-workers of the Mint in 1485 and 1492.¹⁹ Of a higher social status was Sir John Elrington, the king's Treasurer, whose will refers to his household goods at his place at Hoxton. He built a chapel dedicated to St Mary on the north of the church of St Leonard and in 1482 obtained a royal licence to found a chantry there, whose chaplain served the parish as morrow mass priest. Sir John and his second wife were buried in his chapel whilst Sir Humphrey Starky, Recorder of London and baron of the Exchequer, who held 160 acres of land and three messuages in the parish, was interred with his wife in the choir.²⁰

The vicar of Shoreditch, serving the cure in place of the rector, received a goodly annual stipend of £16, and this meant the parish could attract educated priests. Robert Western, the vicar who died in 1468, was able to bequeath to other clerics a writing chair and several books, amongst them a small bible, and copies of *Legenda aurea* and *de la sege de Troy*, whilst he left a psalter with hymnal to the brewer Richard Churchman, and made a coiner, William Austen, co-executor. In 1461 Robert Welborne, clerk, probably one of the parish chaplains, owned a library which included a life of St Cuthbert, a psalm translated by Richard Rolle of Hampole, and *Bonaventure de vita Christi*, the last bequeathed to John Austen, a married clerk. Stephen Pudde, chaplain, who appointed John Reedy, coiner, one of his executors in 1467, left '*unum par de clavydulce*'.²¹ This was a primitive piano, used for teaching music, and raises the intriguing possibility that there was a choir school attached to St Leonard's, which the coiners' sons may have attended.

Walter Mayn of St Sepulchre, who referred to himself as moneyer in the Tower of London in 1380, was described by his widow in 1405 as late citizen and moneyer of London, suggesting a close link with the City, for citizen was a specific description, achieved by apprenticeship, purchase or patrimony. John Toller of London was called 'moneour' in a 1379 patent roll entry, and Hugh Toller *monetarius de London* in his 1397 will.²² However, moneyers soon ceased to be citizens of London for this was not seen to be a requirement of their craft. The surviving records give the strong impression that the moneyers, or coiners, to use the English word they themselves preferred, become a recognisable craft company around the mid-fifteenth century. This is apparent even when other factors, such as the increasing use of English and the more frequent designation of a man's status, are taken into account. It was Hugh Sharpe of Newington, who, in his will of 1444, was the first to describe himself as 'cunor', followed by Thomas Austen of Hackney, 'coy-

¹⁶ *Survey of London*, viii, 3; *The Chantry Certificate of London and Middlesex, 1548*, edited by C.J. Kitching, London Record Society 16 (1980), no. 126.

¹⁷ GL: MS 9171/6 f.28v. Atherton requested burial in the church of the House of St Mary Bethlehem.

¹⁸ *CCR 1461-1468*, 459; J. Strype, *A Survey of London ... written at first by John Stow*, 2 vols (London, 1720), ii, book iv, 52; GL: MS 9171/7 f.94v; PRO: C 219/17/3; J.L. Bolton (ed.), *The Alien Communities of London in the Fifteenth Century*, Richard III & Yorkist History Trust (Stamford, 1998), 113. Richard Churchman's father, John, was also of Shoreditch, whilst he himself outlived two wives, Alianor and Agnes, and was survived by a daughter, Elizabeth, wife of Thomas Hodgeson, MS 9171/4 f.103v, PRO: PROB 11/11 f.53.

¹⁹ GL: MS 9171/7 f.94v; PRO: C 1/83/86; *CPR 1485-1494*, 53 & 418.

²⁰ PRO: PROB: 11/7 f.59; *Chantry Certificate* no. 126; *Survey of London*, viii, 97-8; *CPR 1476-1485*, 304; PRO: E 150/464; Strype, *Survey*, ii, book IV, 51.

²¹ *Chantry Certificate* no. 126; GL: MS 9171/5 ff.34v, 313v & 362, 16 f.20.

²² GL: MS 9171/1 f.72; MS 9051/1 f.170; *CPR 1377-1381*, 320; MS 9051/1 f.57.

²³ GL: MS 9171/4 f.169, 15 f.42v, PRO: PROB 11/4 f.97.

nour' in 1451, whilst John Harryonge, 'coignor', was named co-executor to a fellow-moneyer, John Hill of Shoreditch, in 1458.²³ A 1448 Hackney rental of the bishop of London, which gives few occupations, describes Thomas Austen again as 'coynour', the London Husting Roll in 1467 includes a deed granting John Hart, 'coynour' and Agnes his wife, a messuage and brewhouse in St Giles without Cripplegate, and William Holwey, 'kornor' of Shoreditch and his wife Clemence are mentioned on the Close Roll in 1473.²⁴ Since all these documents will have been written by different scribes, the use of the term cannot be due to the preferences of a single individual. Wills from the mid-fifteenth century are much more inclined to use the term coiner: in 1452 William Wyllyam, a Shoreditch smith, appointed John Hill and John Harryonge, 'coignours', executor and supervisor respectively, and, twenty years later, John Veleys of Shoreditch, yeoman, made John Reedy, coiner, a co-executor, whilst two of his witnesses were Richard Hart and William Croft, also coiners. This contrasts, for instance, with the 1413 will of William Hart whose witnesses, John Toller and John Margret, although moneyers, are not so described.²⁵

Yet the craft of coining was intermittent since large numbers of moneyers were only required, for example, during a recoinage, although trained men then needed to be readily available. In the 1340s pressure had been put on mint officials in Canterbury and St Edmund's to encourage provincial moneyers to go to the Tower to assist there.²⁶ This was as a result of the 1343 directive that the minting of silver coins was to be supplemented by the production of gold coins in order to meet the demand for coinage arising from the illegal export of English coin.²⁷ In November 1485, the indenture Henry VII made with his master-workers, Sir Giles Daubeney and Bartholomew Reed, goldsmith, stated that the moneyers and workmen were to be ready to attend their 'werkis' at all times when they had been warned, on pain of losing their franchises, and their bodies to prison.²⁸ This is echoed in a similar paragraph of the 1578 regulations, that without good cause, no moneyer was to refuse work when required, else they would be at risk of dismissal from the company. It does appear from the subsidy exemptions – as men do not appear in consecutive lists – that moneyers did not work consistently at the Tower. Thus they probably followed other occupations: the William Austen described as a king's moneyer at Shoreditch in the 1460s, is almost certainly the same man as William Austen of Shoreditch, a brewer in 1463.²⁹ John Aleyn, the coiner who died in 1457, is likely to be the John Aleyn of Shoreditch who was granted protection to travel to France in 1443–4 in the retinue of John Langton, treasurer of Calais and John Saltby, ironmonger and citizen of London in 1457, may also be the coiner of 1446.³⁰ In 1484 Robert Hart, coiner, bequeathed to his apprentice Robert Sharpe, probably the son of a fellow coiner, Thomas Sharpe of Newington Green and his godson (in addition to half an acre of land in Walthamstow Marsh) his anvil, four hammers, a mallet, a pair of tongs, a hammerkyn and two pairs of shears, moveable items that he owned not only as a coiner for his work at the Tower, but possibly also as a smith elsewhere. Fifty years earlier another coiner, Richard Pykarne, also left his servant his working tools: an anvil, all his best hammers, a pair of tongs and two pairs of shears together with the ship's chest in which they were no doubt stored.³¹

One privilege jealously claimed by all those who, as part of the Mint Corporation were crown servants, which included the moneyers, was exemption from certain taxes, first formally granted by Edward I and confirmed by subsequent monarchs.³² In 1371, for example, a writ addressed to the collectors for Middlesex ordered them to stay their demands on 21 of the king's moneyers for their portions in that county, viz. 3s. 4d. for lands and chattels in Shoreditch, 3s. 11d. in

²⁴ Cambridge University Library MS Ee.1.3 f.267, CLRO: hr 197(2), CCR 1468–1476, no. 1093.

²⁵ GL: MS 9171/5 f.52v & /6 f.133v, MS 9051/1 f.295v, *Feudal Aids*, iii, 379.

²⁶ CCR 1343–1346, 338.

²⁷ Reddaway, 'The King's Mint and Exchange in London' (as in n. 2), I, 22.

²⁸ CPR 1485–94, 53; *Reports from Commissioners* xxviii (1849) Pt 2, Qn 266.

²⁹ PRO: E 179/141/64; CCR 1461–68, 155. There were other links between the two crafts: the two husbands of Margaret, daughter of John Everard, coiner, were William Smyth and Richard Mayhew, both brewers, GL: MS 9171/5 f.245, /6 f.245v & /3 f.221, PRO: C 1/24/13. Richard Churchman, who appears regularly in deeds together with coiners 1450–1490, was also a brewer, CCR 1476–1485, no. 28.

³⁰ *Deputy Keeper of the Public Records, 48th Report* (London, 1887), p. 359; CCR 1441–1447, 173; CCR 1454–1461, 199.

³¹ GL: MS 9171/5, f.8, /6 f.22 & /3 f.389v.

³² *Calendar of Charter Rolls 1427–1516*, 143–4; BL: Harl MS 698, ff.13–17.

Newington, Islington, and 2s. 6d. in St. Sepulchre without Newgate, a parish in the suburbs of London lying partly in Middlesex.³³ The Kent subsidy roll for 1334–35 provides an earlier example of this type of exemption: in that year 70 men listed as mint officials were exempt from payment of the subsidy, drawn not only from the city of Canterbury and its suburbs, but also from more distant hundreds. These moneyers also seem to have been amongst the richer men assessed and it has been suggested that the incentive of non-taxation drew men who were already in official positions, or who traded as merchants, to serve in these posts.³⁴ However, the moneyers at the Tower were almost certainly those who physically struck the coins, rather than mint officials.

There are some 25 surviving 'Particulars of Account' for Middlesex between 1340/1 and 1536, listing moneyers who were granted tax exemption.³⁵ That dated c.1453–1456 names probably 21 *Monetarii regis infra Turram* who were assessed on the subsidy of the fifteenth and tenth in Middlesex, of whom all but one held land in Shoreditch and several in more than one parish. Two men were also assessed under Stoke Newington, three in Haringey and Stepney, four in Islington and Hackney, and five in Tottenham. The assessments covered a fairly wide financial range: for the fifteenth, Nicholas Clerke was assessed at 18d. in Shoreditch, 3d. in Stoke Newington and Haringey and 8d. in Hackney, whilst Nicholas Toller's assessment was a mere 2d. in Shoreditch.³⁶ Yet in 1416 John Toller was assessed for goods and chattels worth 2s. 8d. in Shoreditch, 3s. 4d. in Stoke Newington, 14d. in Haringey and 8d. in Islington, the richest moneyer named, with William Harryonge assessed at 20d. in Shoreditch. In 1346/47, the goods of the four men named Hart were each noted at 3s. 4d., and that of John Harryong, at 2 shillings.³⁷ However, because Shoreditch was not assessed separately but grouped with West Smithfield, Stoke Newington, Islington and Finsbury for the collection of the tax, it is not possible to estimate the wealth of the moneyers as a proportion of the total wealth of those assessed Shoreditch itself. But in 1416, for example, the taxpayers of these five villis were assessed at £18. 11s. 0d., whilst the moneyers' exemptions amounted to £14. 10d., or about 7 per cent; of this, moneyers in Shoreditch were assessed at 16s. 4d., Islington at 2s. 8d. and Stoke Newington, 5s. 10d.

The reason for this cluster of coiners in Shoreditch, where at least 78 out of the 117 moneyers listed in the Appendix are known to have held land, and their apparent reluctance to live nearer the Tower of London, is difficult to understand. However, one possible explanation is that Shoreditch was chosen because whilst it was close to the Tower, the parish actually lay outside the limits of the jurisdiction of the mayor of London. This meant that their craft would not be subject to civic (specifically mayoral) control and they would not have to enroll their craft rules with the mayor, as did most other crafts.³⁸ It does mean that these craftsmen should not be seen in isolation, but as part of the wider community of Middlesex, even though they were excused from filling offices such as juror, collector of taxes or constable. The 1472 Middlesex Parliamentary indenture provides a particularly interesting insight into relations between the moneyers, the master-worker and the king.³⁹ In the summer of that year Edward IV, who had regained the throne in 1471, felt secure enough to call the first Parliament for four years.⁴⁰ Middlesex sent to Westminster Sir Roger Ree

³³ CCR 1369–1374, 306: Nicholas Alban, John Clerke, John Clopton, Henry Combe, Richard atte Gate, John Harryonge [snr], John Harryonge [jnr], Roger Heryoun [Harryonge], John Hart, Richard Hart, John Haveryng, Richard Haveryng, John Hyne, Walter Mayn (not Mayu) John Marly, William Marly, John Pentecost, John Sharpe, William Sherne, John Symond, William Toller.

³⁴ John D. Brand, 'Canterbury Mint Officials in 1334–35', *Seaby Coin and Medal Bulletin*, 796 (December, 1984), 308–9. I owe this reference to Dr. Martin Allen.

³⁵ PRO: E 179/141/9, 12, 13, 16–20, 25–30, 32, 33, 34, 36, 46, 48, 50, 57, 65, 78, 86/1, 123 and 164. They also continue thereafter. I am indebted to Mr Mark Forrest for pointing me to this extensive series of Exchequer Returns.

³⁶ PRO: E 179/141/86: John Aleyn, Nicholas Clerke, Nicholas Cooke, John Everard, John Haveryng, John Harryonge, John Hart, Richard Hart [snr], Richard Hart [jnr], Richard Hart [atte Pale], John Hill, William Hungerford, Richard Purdon, John Reedy, William Reedy, Thomas Sharpe, William Sharpe, John Sylvester, Nicholas Toller and William Wyllesmere.

³⁷ PRO: E 179/141/50, mm.1–2; E 179/141/12.

³⁸ I owe this probable explanation to Professor Caroline Barron.

³⁹ PRO: C 219/15/1. Parliament in 1406 had laid down new electoral procedures, so that, after an election had been held, an indenture was drawn up on which not only the names of the members-elect would be recorded, but also the names and seals of all those present, the electors, who would attest to the validity of the election, thus Parliamentary attestors. In 1429 another Parliamentary statute restricted the electorate to the forty-shilling freeholder, a qualification which remained in place until the nineteenth century. In Middlesex there are thirty-one surviving Parliamentary indentures out of a total of forty-three Parliaments between 1407–1478: the numbers in each indenture range from 14–67.

⁴⁰ J.S. Roskell, *The Commons and their Speakers in English Parliaments, 1376–1523* (Manchester, 1965), p. 283.

and Sir Robert Green, both strong Yorkists, and knights within the royal household. The master-worker then at the Mint was William, lord Hastings, the king's most trusted councillor, and it would seem that Hastings took appropriate measures to ensure the due election of Ree and Green. Out of the forty-eight men who attested at the Middlesex hustings on 27 August 1472 at Stone Cross, in the Strand, eleven, or twenty-three per cent, were moneyers of the Tower, presumably sent out by Hastings to support the king's candidates. It also indicates that these coiners will have been 40 shilling freeholders and so entitled to attend the hustings, even if they usually preferred to avoid this duty, for none is found attesting at any other election for which there is a surviving record.⁴¹

The wills and other evidence also emphasises what has been previously noted, that the moneyers formed an exceptionally close-knit group, whose numbers seem to have averaged fifteen to twenty at any one time from the reign of Edward III to that of Henry VIII. Many men of the same surname appear as coiners – Austen, Clarke, Harryonge, Hart, Haveryng, Mody, Sharpe, Toller and Yonge – who acted as executors, feoffees and witnesses for one another. Yet, perhaps surprisingly, the evidence shows no inclination by coiners to appoint senior mint officials in these capacities: they preferred to rely on fellow-coiners or neighbours. Even as late as the nineteenth century the moneyers were still characterised as a small, inward-looking group, for Richard Frankelyn, one of the company questioned in 1848, agreed that it was their custom to recommend, as apprentices, members of their own families and immediate connections, and so confine the company to their relations.⁴² The privilege of non-taxation was obviously important, but this closed-shop may also have been due to the greater trust placed in family members in the face of obvious temptation in handling gold and silver, since any transgression would reflect badly on other moneyers. That there were breaches in security is illustrated by an episode in April 1505 when 'a moniemaker, one of the coiners of the Tower, was drawne to Tilburne and there hanged'.⁴³

Hugh Sharpe, coiner (died 1444) was himself probably the son of John Sharpe, a moneyer in 1371, and he had two sons, William and Thomas, and a grandson, Robert, who all followed the family craft.⁴⁴ John (II) Toller, son of William, and probably father of Nicholas, all coiners, was supervisor of the will of John Haveryng, moneyer, in 1409 and acted as executor for Dionisia Hunt and Katherine Scott (perhaps widows of moneyers) in 1410 and 1419 respectively.⁴⁵ John Hill, coiner, was executor of Richard Pykarne, coiner, whilst Hill's daughter Clemence became the wife of yet another, William Holwey, who was feoffee for a fourth, Richard Hart. Hill's step-daughter, Johanna, married a chapman, John Rawlyns, who himself made John Haveryng, coiner, an executor.⁴⁶

Six generations of the Hart family can almost certainly be traced from William Hart in 1340/1 to Richard Hart in 1472, whilst the family of Harryonge can be found in Hoxton from before 1260. John Harryonge, likely to be descended from William (I) Harryonge, moneyer in 1340/1, via one of the men of that name who were moneyers in 1371, was a prominent figure amongst the coiners from 1452 to 1472, as was his contemporary Richard (IV) Hart.⁴⁷ In the 1484 will of the latter's son, Robert Hart, are mentioned his apprentice Robert Sharpe, no doubt son of the coiner Thomas Sharpe, his two godsons and nephews John and William Harryonge, and, as two of his executors, his brother Richard (V) Hart and brother-in-law Robert Harryonge, again both coiners.⁴⁸ The bequest of a gold ring in February 1485/6 by Johanna Underhill, widow of

⁴¹ *CPR 1467–1477*, 138–89, 313–15; PRO: C 219/17/2. The attestors were John Harryonge, William, Richard, John and Robert Hart, William Austen, William Sharpe, William Redee, John Rydee, Nicholas Toller and Thomas Sharpe.

⁴² *Report from Commissioners* xxviii (1849), Pt. 2, p. 153, Qns. 366–71.

⁴³ *Holinshed's Chronicles of England, Scotland and Wales*, edited by H. Ellis, 6 vols. (London, 1807), iii, 532.

⁴⁴ GL: MS 9171/4 f. 169, *CCR 1369–74*, 306; PRO: E 179/141/86; GL: MS 9171/5 f. 8.

⁴⁵ GL: MS 9051/1 ff. 113, 216 & 225v; MS 9171/3 f. 44.

⁴⁶ GL: MS 9171/3 f. 389v, W.J. Hardy and W. Page (eds), *A Calendar to the Feet of Fines for London and Middlesex, Richard I–Richard III* (London, 1892), i, 208, no. 62; PRO: C 1/208/13; *CCR 1468–1476*, no. 1093; PRO: PROB 11/4 f. 97; MS 9171/6 f. 4v; PRO: E 179/141/164.

⁴⁷ The family of Hart was known in Shoreditch by 1336, where a grant by Margery, daughter of Reginald Toloson, was witnessed by John, Roger and William Hart, and Hugh Hericen, British Library: Addl. Charter 40,489; *Survey of London*, viii, 81; PRO: C66/698, m. 11; PRO: E179/141/16.

⁴⁸ GL: MS 9051/1 f. 295v & MS 9171/7 f. 8.

Islington, to Margery, wife of Robert Harryonge of Hoxton, 'provest', furnishes a date by which Robert had become the prime figure in his company.⁴⁹ It also implies not only the importance of Harryonge's position, but that the Moneyers' company was well-known and readily identifiable outside the Tower. Since Johanna also refers to the 'poorest married' of his daughters, Robert must have been in his fifties by this date. In his own will of 1500, Robert Harryonge, 'coighnour', bequeathed to his son Richard the 'grete place that John Heryonge my late fader dwelled inne' at Hoxton, whilst Johanna Butler, his daughter, was to inherit a close which had once belonged to Richard Hart her grandfather.⁵⁰ Richard Harryonge, son of Robert, was provost by 1536 and in post at his death; he left his company of Moneyers 20 shillings to pray for his soul and 'to make them merry' in 1545, and felt confident enough of his status to proclaim himself a gentleman.⁵¹ Both Robert and Richard (and their wives) are commemorated on a memorial in Shoreditch church, whereon they are described as Provosts of the King's Mint within the Tower of London.⁵²

This is not to say that there was no interaction outside the company, for sons were often apprenticed in London livery companies, perhaps to provide an additional trade when there was little demand for coiners. The coiner Robert Harryonge of Hoxton, who was a grantee of the goods and chattels of John Browne, citizen and butcher of London in 1462, was presumably the future provost, whilst the Robert Harryonge recorded as an apprentice of John Amadas, citizen and goldsmith, in 1466, was perhaps his son. Unfortunately the only surviving Exchequer return of moneyers exempted from the subsidy in the reign of Edward IV and on which the name of Robert Harryonge appears, is undated, but Robert was not one of the Parliamentary attestors of 1472, perhaps because his father was alive; however, he may have been provost by this time, and thus protected by his status from having to attend the husting.⁵³

Another of Robert's sons, John Harryonge, was a tailor's apprentice c.1486–93, and John, son of William Sharpe, coiner of Hoxton, was a haberdasher by 1486.⁵⁴ Moneyers did have links with those outside their craft, so that in 1450 Thomas Holgrave, citizen and skinner of London, could make Richard Hart of Hoxton, coiner, one grantee of a gift of his goods (probably in fact a chattel-mortgage) whilst Richard in turn appointed Thomas supervisor of his will in 1462.⁵⁵ Richard Austen, deputy bailiff to the bishop of London in nearby Hackney c.1463–1466, is likely to have been the son of Thomas Austen, coiner, and the brother of another coiner, also named Thomas.⁵⁶ Moneyers appear as witnesses to deeds or charters of the greater landowners in the neighbourhood: in 1383 William Harryonge, John Clerke, and John Haveryng the elder and younger were among witnesses to a quitclaim of the feoffees of John Northampton, who held farmlands and tenements at Hoxton in Shoreditch, whilst in 1401 William Hart, William Clerke and John Toller witnessed a charter of his son and heir James Northampton, member of Parliament for Middlesex in 1402.⁵⁷

The listing of the 117 moneyers in the Appendix is by no means exhaustive and could be expanded by the inclusion of several other men who, on circumstantial evidence, were probably moneyers. For example, the grant of a writ in 1402 in favour of John Halingbury, amongst whose mainpernors were John Haryngey (a coiner) at the suit of John Shordich, John Sharpe the elder and younger, William Sharpe (the last three all coiners) and Richard Sharpe, has all the appearance of a dispute amongst a group of moneyers, perhaps a failed arbitration since John Shordich

⁴⁹ GL: MS 9171/7, f.74. It seems that Johanna, heir to her father William Brockhurst, brewer of Islington, and widow of William Underhill, citizen and waxchandler, was related to the Hart family. MS 9171/4, f.137v & /6 f.309; CLRO: hr 197 (2) & (3). Her will makes bequests to Johanna, daughter of William (IV) Hart, perhaps the son of John (IV) Hart, and unnamed married daughters of the same Robert Harryonge. This is the only mention of the provost found amongst the records.

⁵⁰ PRO: PROB 11/12 ff.131v–132.

⁵¹ PRO: PROB 11/30, f.263.

⁵² H.J. Bradley, *History of Shoreditch Church* (London, 1914), 20.

⁵³ C.E. Challis, 'Three Notes on the Tudor Mint', *BNJ* 68 (1998) 149; *CCR* 1461–1468, 155; PRO: E 179/141/164; C 219/15/1.

⁵⁴ Merchant Tailors' Company London, Anc. MS Bk.37 (I owe this reference to Dr Matthew Davies); PRO: C 1/108/86.

⁵⁵ *CCR* 1447–54, 236; GL: MS 9171/4 f.334v.

⁵⁶ PRO: SC 6/1140/25,26; GL: MS 9171/6 f.40v. Richard Austen of Hoxton, moneyer in 1590, probably belonged to this same family, as did John and Thomas Austen, moneyers in 1536/7. *Survey of London*, viii, 66; PRO: E 179/141/123.

⁵⁷ *CCR* 1381–1385, 389, *ibid* 1399–1402, 399–400; J.S. Roskell, L. Clark & C. Rawcliffe, *The History of Parliament, The House of Commons 1386–1421*, 4 vols (Stroud, 1992), iii, 847–48.

was a member of Parliament for Middlesex and a Hackney landowner. John Shordich was also apparently related to several London goldsmiths of the same name, prominent in the mid-fourteenth century Mint and Exchange.⁵⁸ Overall, however, few links have been found between late medieval coiners and members of the Goldsmiths' Company.

The mistery of coiners, a small but important body of craftsmen, were summarized in 1696 as men who 'live in the country, attend the mint whenever called, take apprentices, and form themselves into a government by electing one of them to be their Provost'.⁵⁹ The evidence suggests that the company developed from a group of coiners who were members of the parish fraternity of Our Lady at the parish church of St Leonard, Shoreditch from the fourteenth century onward, as part of the wider movement towards formal craft associations in the mid-fifteenth century.⁶⁰ That it was a tightknit, family-related company was probably due in part to security considerations, as well as to the privilege of tax exemption, yet they appear to have had little if any interaction with other members of the Mint. In fact, coiners chose not to live in close proximity to the Tower of London but outside the City (and its regulations) at Shoreditch, where they formed a prominent and probably educated community within the parish. Although the Moneyers' company had no foundation in law but relied instead on custom and tradition, the services it provided proved valuable enough to the Crown to enable the company to endure for over four centuries.

APPENDIX

Moneyers of the Tower of London, c.1340–c.1535

The list is arranged as follows:

Surname. Christian name (date of death) place of residence
(relationships)
craft/occupation
subsidy exemptions
Parliamentary attestation
period active
(references)

ALBON, Nicholas, of Shoreditch, Stoke Newington & Hackney, Middlesex
moneyer
1371, 1377, 1378, 1383/4, 1384/5, 1387, 1387/8, 1392 & 1393 (as Richard, *recte* Nicholas?) subsidy exemptions
1371–1393
(CCR 1369–74, 306; PRO: E 179/141/20, 25, 28, 29, 30, 32, 33 & 34)

ALEYN/ALAYNES, John (*d.* 1457) of Shoreditch, Middlesex
'coyner'
1414, 1416, 1428, 1437, 1446 & 1453 subsidy exemptions
1428–c.1456
(PRO: E 179/141/48, 50, 65, 78 & 86; *Feudal Aids*, iii, 379; *DKPR*, 48th Report, 359; GL: MS 9171/5 f.228v; Brit. Library Addl. MS 30,295)

AUSTEN, John, of Shoreditch, Middlesex
'quenar' 1536/7 subsidy exemption
(PRO: E 179/141/123)

AUSTEN/ASTON, Thomas (I) (*d.* 1452) of Homerton Street, Hackney, Middlesex
(father of Thomas (II) Austin)
coiner
1437 & 1446 subsidy exemptions
1435–51
(Cambridge University Library, MS Ee.1.3, ff.67–68; PRO: E 179/141/65 & 78; GL: MS 9171/3 ff.17, 437, /4 ff.45, 47v & 235v, /5 f.42v)

BARNARDCASTELL, John, of Westsmithfield & St Sepulchre without Newgate, Middlesex
1382, 'custos cuneorum Reges infra Turrim'
perhaps also Brewer; Rent-Collector. St James Hospital, Westminster
1407, 1411 & 1414 Parl. Attestor
1388–1420
(*Parish Fraternity Register: St Botolph w/o Aldersgate*, edited by P. Basing, London Record Soc. 18 (1982) no. 24; CCR 1435–41, 163; PRO: C 219/10/4 6, 11/4; CFR 1405–13, 93; CFR 1413–22, 150, 171; E. Williams, *Early Holborn* 2 vols. (London, 1927), i, 289; *London Bridge: Selected Accounts*, edited by V. Harding & L. Wright, LRS 31 (1994) no. 249)

⁵⁸ CCR 1402–1405, 118; *House of Commons 1386–1421*, iv, 369–71. The Shordich family also held the manors of Ickenham and Chelsea, Middlesex. Robert de Shordich, goldsmith, had been a changer of the Mint and surety for the master-workers in 1343, CCR 1343–1336, 261–62.

⁵⁹ Ruding, *Annals of the Coinage* (as in n. 4) ii, 465.

⁶⁰ G. Unwin, *The Gilds and Companies of London* (London, 1903), pp. 160–3; Barron, 'Parish Fraternities' (as in n. 12), 22–3.

- AUSTEN/ASTON, Thomas (II) (*d.* 1479) of Homerton Street, Hackney, Middlesex
(son of Thomas (I) Austin) coiner
1448-1479
(Cambridge Univ. Lib., MS Ee.1.3, ff.267-68; GL: MS 9171/5 ff. 42v, 148v; /6 ff.40v, 263v, 246v; CCR 1454-61, 279)
1347, 1349, 1371, 1377, 1378, 1383/4, 1384/5, 1387, 1387/8, 1392 & 1393 subsidy exemptions
1347-1393
(CCR 1369-74, 306; PRO: E 179/141/12, 18, 20, 25, 28, 29, 30, 32, 33 & 34; see also GL: MS 9051/1 ff.12, 216 & 291)
- AUSTEN, Thomas (III) of Shoreditch, Middlesex
'quenar'
1536/7 subsidy exemption
(PRO: E 179/141/123)
- AUSTEN/HAUSTEN, William, of Shoreditch, Middlesex
moneyer (and brewer)
temp. Edward IV, subsidy exemption
1472, Parl. Attestor
1463-1472
(PRO: E 179/141/164; CCR 1461-68, 155; GL: MS 9171/5 f.362, /6 f.34v; PRO: C 219/17/1; C 1/110/15; CCR 1500-05, no.258)
- BARDES, Walter, of Stepney, Middlesex
moneyer
1393 subsidy exemption
(PRO: E 179/141/34)
- BOWYER, Thomas, of Knightsbridge & Ebury in Westminster, Middlesex
moneyer
1393 subsidy exemption
(PRO: E 179/141/34)
- BROKE/BROOKE, William of Shoreditch & Stoke Newington, Middlesex
moneyer
1414, 1416, 1428, 1437 & 1446 subsidy exemptions
1414-1446
(PRO: E 179/141/48, 50, 65 & 78; *Feudal Aids*, iii, 379; perhaps PRO: PROB 11/11 f.53; GL: MS 9171/5 f.160v; see also PRO: C 67/45 m.23; GL: MS 9171/5 f.336v)
- CHAMBER, John atte. of Shoreditch & Hackney, Middlesex
moneyer
1428, 1437 & 1446 subsidy exemptions
1428-1446
(*Feudal Aids*, iii, 379; PRO: E 179/141/65 & 78; GL: MS 9171/4 f.7v; and perhaps PRO: C 1/208/13; MS 9171/5 f.200)
- CHIGWELL, John, of St Olave, Hart Street, London
citizen and moneyer
pre 1352
(*London Possessory Assizes*, H M Chew, ed, LRS 1 (1965), no.91)
- CLERKE/Le CLERC, John, of Shoreditch & Stoke Newington, Middlesex
(probably father of William)
moneyer
1446, 1453 & *temp* Edward IV, subsidy exemptions
1446-1456
(PRO: E 179/141/78, 86 & 164; see also GL: MS 9171/3 ff.401v & 389v)
- CLERKE, Nicholas, of Shoreditch, Hackney, Stoke Newington & Haringey, Middlesex
(probably son of William)
moneyer
1414, 1416, 1428, 1437, 1446 & 1453 subsidy exemptions
1414-c.1453
(*Feudal Aids*, iii, 379; PRO: E 179/141/48, 50, 65, 78, 86; Cambridge Univ. Lib. MS Ee.1.3 ff.267-68; Brit. Library Addl. MS 30,295; see also GL: MS 9051/1 ff.216 & 291; CCR 1422-29, 455-56)
- CLERKE, William of Shoreditch & Stoke Newington, Middlesex
(probably son of John)
moneyer
1382, 1392, 1393, 1401 & 1414 subsidy exemptions
1391-1414
(PRO: E 179/141/27, 33, 34, 36 & 48; GL: 9051/1 ff.216, 218 & 295v; CCR 1399-1402, 399)
- CLOPTON, John (*d.* 1377) of Shoreditch, Middlesex
(probably son-in-law of Hugh Wood)
moneyer
1371 subsidy exemption
1371-1377
(CCR 1369-74, 306; CCR 1377-81, 373; GL: MS 9171/1 ff.24v & 48)
- COTON, Robert, of Stepney, Middlesex
moneyer
1401 subsidy exemption
(PRO: E 179/141/36; C 219/10/2)
- COLE, John, of Shoreditch, Middlesex
coiner; apprentice to Robert Harryonge
1500-c.1518
(PRO: PROB 11/12 f.131v; C 1/129/52 & 394/1; C. Challis, 'Three Notes on the Tudor Mint', *BNJ* 68 (1998), 151)
- COL[E]MAN, William see STOUR
- COMBE, Henry, of Middlesex
moneyer
1371 subsidy exemption
(CCR 1369-74, 306)
- COOKE/COK/COKE *alias* COLE, Nicholas, of Shoreditch, Middlesex
moneyer
1446, 1453 & *temp* Edward IV, subsidy exemptions
1446-1456
(PRO: E 179/141/78, 86 & 164; see also GL: MS 9171/3 ff.401v & 389v)

- CROFT, William, of Shoreditch, Middlesex
moneyer
1472-1479
(GL: MS 9171/6 ff.133v & 245v)
- ERLAND/IRLAND, Robert, of Stepney, Middlesex
moneyer
temp. Edward IV. subsidy exemption
(PRO: E 179/141/164)
- EVERARD, John (*d.* 1458) of Shoreditch, Mddx
coiner, moneyer
1416, 1428, 1437, 1446 & 1453 subsidy exemptions
1416-c.1453
(*Feudal Aids*, iii, 379; PRO: E 179/141/50, 65, 78 & 86; GL: MS 9171/5 f.245; perhaps MS 9171/2 f.237)
- FYNOUR, William, of Halistreet, Middlesex
moneyer
1414 subsidy exemption
(PRO: E 179/141/48)
- GATE, Richard atte, of Middlesex
moneyer
1371 subsidy exemption
(*CCR 1369-74*, 306)
- GODEGAM, John, of Hackney, Middlesex
moneyer
c.1511
(*L & P Henry VIII*, i, pt.1, no.969 (17))
- GO[L]DYNG, William, of Hackney, Middlesex
moneyer
1340/1, 1347 & 1348 subsidy exemptions
1340-1348
(PRO: E 179/141/9, 12 & 16; see also *CCR 1381-85*, 388 & 389)
- GYE, Thomas de, *alias* Legard (*d.* 1394) of Ebury, Middlesex and St Mildred Poultry, London
nummularius
1387/8 & 1392 subsidy exemptions
1387-1394
(PRO: E 179/141/32 & 33; GL: MS 9051/1 f.12)
- HALINGBURY, William (*d.* 1463) of Shoreditch & Stepney, Middlesex
'coinour'
1446 & 1453 subsidy exemptions
1446-1463
(GL: MS 9171/5, f.336v; PRO: E 179/141/78 & 86; see *CCR 1396-99*, 123; *CCR 1402-05*, 118; MS 9171/3 f.480).
NB: John Halingbury senior was *alias* Willesmere (*qv*) in 1400, PRO: KB 9/184/1 m.40, 185/2 m.79
- HARINGEY, John, of Shoreditch, Middlesex
moneyer
1377 subsidy exemption
1377-1402
(PRO: E 179/141/20; *CCR 1402-05*, 118)
- HARRY, William, of Shoreditch, Middlesex
moneyer
1428 subsidy exemption
(*Feudal Aids*, iii, 379; see also GL: MS 9171/4 f.235v, /5 ff. 13 & 125; Cambridge Univ. Lib. MS Ec.1.3, ff.267-68)
- HARRYONGE/HERYEOUNG, John (I) of Shoreditch, Middlesex
moneyer
1347, 1348, 1349, 1351, 1371 & 1378 (senior) subsidy exemptions
1347-1378
(*CCR 1369-74*, 306; PRO: E 179/141/12, 16, 18, 19 & 25; *CCR 1377-81*, 96)
- HARRYONGE/HERYOUN, John (II) of Shoreditch, Middlesex
moneyer
1371, 1377 (junior) & 1378 (junior) subsidy exemptions
1371-1378
(*CCR 1369-74*, 306; PRO: E 179/141/20 & 25; *CCR 1377-81*, 96)
- HARRYONGE/HENRIYONG, John (III) of Hoxton, Shoreditch, Middlesex
(probably son of William (II); father of Robert)
'coignour'
1437, 1446, 1453 & *temp.* Edward IV subsidy exemptions
1472 Parl. Attestor
1437-1472
(PRO: E 179/141/65, 78, 86 & 164; PROB 11/4 f.97, 11/12 f.131v; C 219/17/2; CAD i, A1594, vi, C4350; GL: MS 9171/6 f.40v, /5 ff.228v & 52v; PRO: C 1/39/16, 108/86 & 110/15; CP 25/1/152/196/14; *CCR 1461-48*, 258; *CCR 1468-76*, no.555)
- HARRYONGE, Richard, (*d.* 1545) of Shoreditch, & Kentish Town, Middlesex
(son of Robert Harryonge)
moneyer; Provost by 1536; gentleman
1536/7 subsidy exemption
1500-1545
(PRO: PROB 11/12 f.131v, 11/30 f.263; E 179/141/123; Challis, *New History of Mint*, 721; *Survey of London*, viii, 44, 61, 65, 81, 98; *Feet of Fines, Middlesex*, ii, 20, 23 & 50; LMA: Acc.ABGR/1; PRO: C 147/166; H. Bradley, *History of Shoreditch Church* (London, 1914) 20; Challis, 'Three Notes on the Tudor Mint', 149-52)
- HARRYONGE, Robert (*d.* 1500) of Hoxton, Shoreditch, Middlesex
(son of John (III) & father of Richard Harryonge; son-in-law Richard (IV) Hart)
coiner. Provost by 1486 *temp.* Edward IV subsidy exemption
1462/1466-1500
(Challis, 'Three Notes on the Tudor Mint', 149-52; PRO: E 179/141/164; *CCR 1461-68*, 155, 258; GL: MS 9171/7 ff.74, 8; PRO: PROB 11/12 f.131v; CP 25(1)/152/97/42; KB 9/397 mm.73-4; Bradley, *Shoreditch Church*, 20; *Survey of London*, viii, 81, 98)

HARRYONGE, Roger, of Middlesex

moneyer

1371 subsidy exemption

(CCR 1369-74, 306)

HARRYONGE/HEYROUN, William (I) of Shoreditch, Middlesex

moneyer

1347 & 1348 subsidy exemptions

(PRO: E 179/141/12 & 16)

HARRYONGE, William (II) of Shoreditch & Islington, Middlesex

(probably father of John (III))

moneyer

1382, 1393, 1401, 1414 & 1416 subsidy exemptions

1377-1416

(PRO: E 179/141/27, 34, 36, 48 & 50; CCR 1377-81, 96 & 471; CCR 1381-85, 388-89)

HART/HERT, John (I) of Shoreditch, Middlesex (*filis Ricardi*; father of William (I) and perhaps Richard (II) & John (III))

moneyer

1340/1, 1347, 1348, 1349, 1351, 1371 & 1377 subsidy exemptions
1340-1377

(PRO: E 179/141/9, 12, 16, 18, 19 & 20; CCR 1369-74, 306; GL: MS 9171/1 ff.24v, 478; Brit. Library Addl. Charter 40,489)

HART, John, (II) of Shoreditch, Middlesex

(*filis Rogeri*)

moneyer

1340/1, 1347, 1348, 1349 & 1351 subsidy exemptions

1340-1351

(PRO: E 179/141/9, 12, 16, 18 & 19; perhaps GL: MS 9171/1 f.428)

HART, John (III) of Shoreditch & Islington, Middlesex

(*filis Willelmi*)

moneyer

1348, 1349 (*filis Willelmi*), 1351, 1383/4, 1384/5 & 1387 subsidy exemptions

1348-1385

(PRO: E 179/141/16, 17, 18, 19, 28, 29 & 30; perhaps GL: MS 9171/1 f.428)

HART, John (IV) of Shoreditch, Islington, Tottenham & Haringey, Middlesex

(probably son of William (II) & nephew of Richard (III) moneyer)

?1414, 1437, 1446, 1453 & *temp.* Edward IV. subsidy exemptions

1472, Parl. Attestor 1414?-1475

(PRO: E 179/141/48, 65, 78, 86 & 164; GL: MS 9171/4 ff.137v & 169; CCR 1454-61, 124; CLRO hr 197(2); PRO: CP 25/1/152/97/27; C 219/17/2; PROB 11/12 f.131v; KB 9/342 m.14; CCR 1468-76, no.444)

HART, John (V) of Shoreditch, Middlesex

(son of Richard Hart *atte* Pale)

?moneyer

?subsidy exemption *temp.* Edward IV

?1472, Parl. Attestor

1458-c.1475

(PRO: E 179/141/164; GL: MS 9171/5 f.250v; PRO: C 219/17/2; C 1/54/20)

HART, Richard le (I) of Shoreditch & Hackney, Middlesex

(father of John (I), and perhaps William (I))

moneyer

1349 & 1351 subsidy exemptions

1349-1351

(PRO: E 179/141/18 & 19)

HART, Richard (II) of Haliwell Street, Shoreditch, & Stepney, Middlesex

(probably son of John (I) and brother of William (II) and John (III))

moneyer

1371, 1377, 1378, 1383/4, 1384/5, 1387 & 1387/8 subsidy exemptions

1371-1388

(CCR 1369-74, 306; PRO: E 179/141/20, 25, 28, 29, 30 & 32; CCR 1377-81, 96)

HART, Richard (III) of Shoreditch, Islington & Stoke Newington, Middlesex

(son of William (III) and father of Richard (IV))

moneyer

1378 & c.1380 (junior) 1384/5, 1387, 1387/8 (junior) 1392, 1393, 1401, 1414, 1416 & 1428 (senior) subsidy exemptions

1378-1428

(*Feudal Aids*, iii, 379; PRO: E 179/141/25, 26, 29, 30, 32, 33, 34, 36, 48 & 50; C 1/7/175; GL: MS 9051/1 f.295v)

HART, Richard (IV) (*d.* 1462) of Hoxton, Shoreditch & Haringey, Middlesex

(son of Richard (III) and father of Richard (V) and Robert; father-in-law of Robert Harryonge)

moneyer

1428 (junior) 1437 (senior) 1446 (senior) & 1453 subsidy exemptions

1428-1462

(*Feudal Aids*, iii, 379; PRO: E 179/141/65, 78 & 86; GL: MS 9171/5 ff.334v & 401v; PRO: PROB 11/12 f.131v; CCR 1447-54, 236; *Survey of London*, viii, 12; Brit. Library Addl. MS 30,295)

HART, Richard (V) of Hoxton, Shoreditch & Stoke Newington, Middlesex

(son of Richard (IV) & brother of Robert)

'coynour'

1437 (junior) 1446, 1453 & *temp.* Edward IV. subsidy exemptions

1472, Parl. Attestor

1436-1487

(PRO: E 179/141/65, 78, 86 & 164; PROB 11/12 f.131v; C 1/26/607, 110/15 & 208/13; C 219/17/2; GL: MS 9171/5 f.334v, 6/ f.133v, 7 ff.8 & 74; CCR 1461-68, 155, 258; CP 25/1/152/97/48; *Feet of Fines, London & Middlesex*, ii, 3)

- HART, Richard (VI) atte Pale (*d.* 1458) of Shoreditch, & Tottenham, Middlesex
(father of John (V))
moneyer
1446 & 1453 subsidy exemptions
1446–1458
(PRO: E 179/141/78 & 86; GL: MS 9171/5 f.250v;
PRO: C 1/54/20; CP 25/1/152/98/70; *Survey of London*,
viii, 50)
- HART, Robert (*d.* 1484) of Shoreditch, Middlesex
(son of Richard (IV) Hart and brother of Richard (V))
moneyer
1472, Parl. Attestor
1472–1484
(GL: MS 9171/5 ff.8 & 334v; PRO: C 219 /17/2)
- HART, Roger le, of Shoreditch & Hackney, Middlesex
(father of John (II))
moneyer
1340/1, 1347, 1348, 1349 & 1351 subsidy exemptions
1336–1349
(PRO: E 179/141/9, 12, 16, 18 & 19; BL: Addl. Charter
40, 489; *CCR* 1381–85, 388)
- HART, William le (I) of Shoreditch, Middlesex
(probably father of Richard (I))
moneyer
1340/1, 1347 & 1348 subsidy exemptions
1336–1348
(PRO: E 179/141/9, 12 & 16; BL: Addl. Charter 40489)
- HART, William (II) (*d.* 1413) of Shoreditch & Stoke
Newington, Middlesex
(*filis Johannis*, father of Richard (III) and probably
brother of Richard (II))
moneyer
1378, 1382, 1383/4, 1384/5, 1387 (senior & *filis
Johannis*) 1387/8 (senior) 1392, 1393 & 1401 (senior)
subsidy exemptions
1374–1413
(*CCR* 1381–85, 388; *CCR* 1399–1402, 399–400; PRO:
E 179/141/25, 27, 28, 29, 30, 32, 33, 34 & 36; GL: MS
9051/1, ff.225v, 295v; MS 9171/1 f.24v)
- HART, William (III) of Shoreditch, Islington, & Hackney,
Middlesex
(*filis Ricardi*, father of John (IV) & brother of Richard
(III))
moneyer
1382, 1387 (*filis Ricardi*) 1387/8, 1392 & 1393 (all jun-
ior) 1401, 1414 & 1416 subsidy exemptions
1387–1416
(PRO: E 179/141/27, 30, 32, 33, 34, 36, 48 & 50)
- HART, William (IV) (?*d.* 1499) of Islington, & Hoxton,
Shoreditch, Middlesex
(perhaps son of John IV)
'coynour'
temp. Edward IV, subsidy exemption 1472, Parl. Attestor
1464–1499
- (PRO: E 179/141/164; PRO: C 219/17/2; *CCR*
1461–68, 258; *Calender Plea & Memoranda Rolls*
London, 1458–82, 177; GL: MS 9171/6 ff. 209v & 340,
7 f.74; PRO: PROB 11/11 f.247)
- HAVERYNG/HAVERHYNGE, John (I) (*d.* 1409) of
Shoreditch & Hackney, Middlesex
(probably father of John (II))
moneyer
1371, 1377 (senior) 1378 (senior) 1382, 1383/4,
1384/5, 1387 (senior) 1387/8 (senior) 1392, 1393 &
1401 subsidy exemptions
1371–1409
(*CCR* 1369–74, 306; PRO: E 179/141/20, 25, 27, 28,
29, 30, 32, 33, 34 & 36; *CCR* 1381–85, 388 & 389; GL:
MS 9051/1 ff. 216 & 218)
- HAVERYNG, John (II) (*dvp* 1399) of Hoxton, Shoreditch,
Middlesex
(probably son of John (I) & father of John (III))
moneyer
1377, 1378, 1383/4, 1384/5, 1387, 1387/8,
1392 & 1393 (all junior from 1378) subsidy exemp-
tions
1377–1399
(PRO: E 179/141/20, 25, 28, 29, 30, 32, 33, & 34; GL:
MS 9051/1 f.82v; *CCR* 1381–85, 388 & 389)
- HAVERYNG, John (III) of Shoreditch, Middlesex
(probably son of John (II) and father of John (IV))
moneyer
1414 (senior) & 1416 subsidy exemptions 1414–1416
(PRO: E 179/141/48 & 50)
- HAVERYNG, John (IV) of Hoxton, Shoreditch &
Hackney, Middlesex
(perhaps son of John (III))
moneyer
1428, 1437, 1446 & 1453 & *temp.* Edward IV, subsidy
exemptions 1428–1466
(*Feudal Aids*, iii, 379; PRO: E 179/141/65, 78, 86 &
164; *CCR* 1461–68, 258; GL: MS 9171/6 f.4v; PRO: C
1/26/607; perhaps MS 9171/5 f.160v)
- HAVERYNG, Ralph, of Middlesex
moneyer
1347 & 1348 subsidy exemptions
1347–1348
(PRO: E 179/141/12 & 16)
- HAVERYNG, Richard of Shoreditch & Hackney, Middlesex
moneyer
1371, 1377, 1378, 1383/4, 1384/5, 1387, 1387/8, 1392
& 1393 subsidy exemptions
1371–1393
(*CCR* 1369–74, 306; PRO: E 179/141/20, 25, 28, 29,
30, 32, 33 & 34)
- HAVERYNG, William, of Shoreditch, Middlesex
moneyer
1378, 1382, 1383/4, 1384/5, 1387, 1387/8,
1391/2, 1392/3 & 1401 subsidy exemptions

- 1378–1401
(PRO: E 179/141/25, 27, 28, 29, 30, 32, 33, 34 & 36; C 1/26/207)
- HILL, John atte (*d.* 1458) of Shoreditch, Hackney, Islington, Haringey & Stepney, Middlesex
(father-in-law of William Holwey)
'coignour'
1428, 1437, 1446 & 1453 subsidy exemptions
1428–1458
(*Feudal Aids*, iii, 379; PRO: E 179/141/65, 78 & 86; BL: Addl. MS 30,295 f.24; GL: MS 9171/3 f.389v, /4 ff.52v & 103v; Cambridge Univ. Lib. Ee.1.3. ff.267–68; PRO: PROB 11/4 f.97; CP 25/1/152/98/62; CAD i, A1594; PRO: C 1/24/13; Brit. Library Addl. MS 30,295)
- HOL[O]WEY, William of Shoreditch, Middlesex
(son-in-law of John atte Hill)
'kornor'
1473–before 1522
(CCR 1468–76, no.1093; CAD, v, A12866; PRO: C 1/208/13; CP 25/1/152/98/62, 97/47 & 48; perhaps MS 9051/1 f.126v, MS 9171/6 f.123; PRO: PROB 11/10 f.239, /12 f.30)
- HUNGERFORD, William of Shoreditch, Islington & Hackney, Middlesex
moneyer
1437, 1446, 1453 & *temp.* Edward IV subsidy exemptions
1437–1464
(PRO: E 179/141/65, 78, 86 & 164; GL: MS 9171/5 f.334v; CCR 1461–68, 258; CAD, iv, C4350; PRO: C 1/54/20; see also PRO: CP 25/1/152/197/48)
- HYNE, John, of Shoreditch, Middlesex
moneyer
1371, 1378, 1383/4, 1384/5, 1387/8, 1392 & 1393 subsidy exemptions
1371–1395
(CCR 1369–74, 306; PRO: E 179/141/25/ 28, 30, 32, 33 & 34)
- LAMBARD, Richard (*d.* c.1442) of Islington, Middlesex
moneyer
1428 & 1437 subsidy exemptions
1428–1442
(*Feudal Aids*, iii, 380; PRO: E 179/141/65; GL: MS 9171/4 f.82; see also GL: MS 9171/7 f.85v; CCR 1369–99, 131)
- LAPYN, Roger, of Middlesex
moneyer
1347, 1348 subsidy exemption
(PRO: E 179/141/13 & 16)
- LEGARD, Thomas see GYE, Thomas de
- MARGRET/MARGARET, John (I) of Shoreditch, Middlesex
moneyer
1382, 1401, 1414 & 1416 subsidy exemptions
1382–1416
(PRO: E 179/141/27, 36, 48 & 50)
- MARGRET /MARGARETER/MERGET, John (II) of Shoreditch, Middlesex
moneyer
1428, 1437 & 1446 subsidy exemptions
1428–1446
(*Feudal Aids*, iii, 379; PRO: E 179/141/65 & 78; GL: MS 9051/1 f.295v, & /3 f.43; Brit. Library Addl. MS 30,295)
- MAYN, Walter (*d.* 1380) of West Smithfield, St Sepulchre without Newgate, London
citizen and moneyer
1371, c.1380, 1377 & 1378 subsidy exemptions
1371–80
(CCR 1369–74, 306; PRO: E 179/141/20, 25 & 26; CCR 1374–77, 208; GL: MS 9171/1 f.72; MS 9051/1 f.170)
- MODY, John (I) of Shoreditch, Middlesex
moneyer
1340/1, 1347, 1348, 1349 & 1351 subsidy exemptions
1340–1351
(CCR 1369–74, 306; PRO: E 179/141/9, 12, 16, 18 & 19)
- MODY, John (II) (*d.* 1388) of Shoreditch & St Giles without Cripplegate, Middlesex
moneyer
1371, 1377, 1378, 1383/4, 1384/5, 1387 & 1387/8 subsidy exemptions
1371–1388
(CCR 1369–74, 306; PRO: E 179/141/20, 25, 28, 29, 30 & 32; R R Sharpe, ed, *Calendar of Wills of the Court of Husting, London*, 1258–1688, 2 vols (London, 1890) ii, 273)
- MODY, Stephen (I) of Shoreditch, Middlesex
moneyer
1340/1, 1347, 1348, 1349 & 1351 subsidy exemptions
1340–1351
(PRO: E 179/141/9, 12, 16, 18 & 19)
- MODY, Stephen (II) of Middlesex
moneyer
1378 subsidy exemption
(PRO: E 179/141/25)
- MODY, William, of Middlesex
moneyer
1348, 1349, 1351, 1371 & 1377 subsidy exemptions
1348–1377
(PRO: E 179/141/16, 18, 19 & 20; CCR 1369–74, 306)
- NORKYN, William, of Shoreditch, Middlesex
moneyer
1340/1 subsidy exemption
(PRO: E 179/141/9)
- PAULE, William, of Hackney, Middlesex
moneyer
1340/1 subsidy exemption
(PRO: E 179/141/9)

- PECOSONE, Richard of Shoreditch, Middlesex
moneyer
1428, subsidy exemption
(*Feudal Aids*, iii, 379)
- PENTECOST, John, of Hackney & Stoke Newington, Middlesex
moneyer
1371, 1377, 1378, 1383/4, 1384/5, 1387 (as Nicholas, *recte* John?) 1387/8, 1392 & 1393 subsidy exemptions
1371–1393
(*CCR* 1369–74, 306; *PRO*: E 179/141/20, 25, 28, 29, 30, 32, 33 & 34; see also *GL*: MS 9171/5 f.371)
- PORDON/PURDON/PURYDON, Richard, of Shoreditch, & Stepney, Middlesex
moneyer, 'coynour'
1428, 1437, 1446 & 1453 subsidy exemptions
1428–1449
(*Feudal Aids*, iii, 379; *PRO*: E 179/141/65, 78 & 86; *PROB* 11/4 f.97; *KB* 9/261 m.19; *GL*: MS 9171/3 f.389v; see also Cambridge Univ Lib MS Ee.1.3 ff.267–68)
- PYKARNE, Richard (*d.* 1434) of Shoreditch, Middlesex
moneyer
(*GL*: MS 9171/3 f.389v)
- REDEF/REDY/RDYDEE/RDYD, John, of Shoreditch, Stepney & Tottenham, Middlesex
(probably son of William)
moneyer
1453 & *temp.* Edward IV, subsidy exemptions
1472, *Parl. Attestor*
1453–1502
(*PRO*: E 179/141/86 & 164; *GL*: MS 9171/5 ff.313v & 336v, /6 ff. 20, 22 & 133v; *CCR* 1461–68, 258; *PRO*: C 219/17/2; C 1/54/20; *CCR* 1500–09, no. 258)
- REDEE/REDY/RDYDEE/RDYDEN, William, of Stepney, Shoreditch, & Islington, Middlesex
(probably father of John)
moneyer
1437 (as Ryden) 1446, 1453 & *temp.* Edward IV, subsidy exemptions
1472, *Parl. Attestor*
1437–1472
(*PRO*: E 179/141/65, 78, 86 & 164; *GL*: MS 9171/5 f.336v, /6 f.20; *PRO*: C 219/17/2)
- SALTBY/SALBY, John, of Stepney & Hackney, Middlesex
moneyer; ?ironmonger & citizen
1446 subsidy exemption
1446–1448
(*PRO*: E 179/141/78; Cambridge Univ. Lib. Ee.1.3, ff.267–68; see also *GL*: MS 9171/2 f.239v & /4 f.235v; *CCR* 1454–61, 199; *PRO*: KB 9/205/1 m.18)
- SAVAGE, Thomas, of Shoreditch, Middlesex
moneyer
1428 subsidy exemption
(*Feudal Aids*, iii, 379)
- SERLE, Nicholas, of Shoreditch, Middlesex
moneyer
1531
(*PRO*: C 147/166; *Survey of London*, viii, 50)
- SHARPE, Hugh (*d.* 1444) of Newington Green, Islington, Middlesex
(probably son of John (I); father of Thomas (I) & William (II))
'conur'
1414, 1428 & 1437 subsidy exemptions
1414–1444
(*PRO*: E 179/141/48 & 65; *Feudal Aids*, iii, 380; *GL*: MS 9171/4 f.169; see also MS 9171/4 f.163 & /5 f.123v)
- SHARPE, John (I) of Islington, Middlesex
(probably father of John (II) and Hugh)
moneyer
1371, 1383/4, 1384/5, 1387/8 & 1392 subsidy exemptions
1371–1402
(*CCR* 1369–74, 306; *PRO*: E 179/141/26, 28, 29, 32 & 33; *CCR* 1402–05, 118)
- SHARPE, John (II) of Islington, Middlesex
(probably son of John (I))
moneyer
1382 (junior) 1401 (junior) & 1416 subsidy exemptions
1382–1416
(*PRO*: E 179/141/27, 36 & 50; *CCR* 1402–05, 118)
- SHARPE, Robert of Middlesex
(son of Thomas (II))
apprentice to moneyer, Robert Hart
1484
(*GL*: MS 9171/7 f.8)
- SHARPE, Thomas (I) of Shoreditch, Newington Green, Islington, & Kingsland in Hackney, Middlesex
(son of Hugh, brother of William, probably father of Thomas (II))
moneyer
1437, 1446 (senior) & 1453–56 subsidy exemptions
1437–1456
(*PRO*: E 179/141/65, 78 & 86; *GL*: MS 9171/4 f.169, /6 f.22v; Cambridge Univ. Lib. MS Ee.1.3 ff.267–68)
- SHARPE, Thomas (II) of Islington & Shoreditch, Middlesex
moneyer
(probably son of Thomas (I); father of Robert)
1446 (junior) & 1453 subsidy exemptions
1472, *Parl. Attestor*
1446–1472
(*PRO*: E 179/141/78 & 86; *GL*: MS 9171/6 ff.22 & 28v)
- SHARPE, William (I) of Islington, Middlesex
moneyer
1393 subsidy exemption
1392–1402
(*PRO*: E 179/141/34; *CCR* 1402–1405, 118)

- SHARPE, William (II) of Shoreditch & Islington, Middlesex**
 (son of Hugh & brother of Thomas)
 moneyer
 1446, 1453 & *temp.* Edward IV, subsidy exemptions
 1472, Parl. Attestor
 1444–1486
 (PRO: E 179/141/78, 86 & 164; GL: MS 9171/4 f.169; CCR 1461–68, 258; PRO: CP 25/1/152/96/14; C 219/17/2; C 1/108/86)
- SHERNE/SHORNE/SCHORNE/STORNE, William atte, of Stoke Newington, Middlesex**
 moneyer
 1371, 1377, 1378, 1382, 1383/4, 1384/5, 1387, 1387/8 (as John, *recte* William) 1392, 1393 & 1401 subsidy exemptions
 1371–1401
 (CCR 1369–74, 306; PRO: E 179/141/20, 25, 26, 27, 28, 29, 30, 32, 33, 34 & 36; GL: MS 9171/1 f.24v)
- STOUR, William (I) *alias* Colman, of Shoreditch, Middlesex**
 (father of William (II))
 moneyer
 1340/1, 1347, 1349 & 1351 subsidy exemptions
 1340–1351
 (PRO: E 179/141/9, 12, 18 & 19)
- STOUR, William (II) of Shoreditch, Middlesex (*filii Willelmi*)**
 moneyer
 1349 & 1351 subsidy exemptions
 1349–1351
 (PRO: E 179/141/18 & 19)
- SYLVESTER, John, of Islington, Shoreditch, & Tottenham, Middlesex**
 moneyer
 1446, 1453 & *temp.* Edward IV, subsidy exemptions
 1446–1464
 (PRO: E 179/141/78, 86 & 164; CCR 1461–68, 258)
- SYMOND, John, of Hackney & Stoke Newington, Middlesex**
 (probably son of Richard)
 moneyer
 1371, 1377, 1378, 1383/4, 1384/5, 1387, 1387/8, 1392, 1393 & 1401 subsidy exemptions
 1371–1401
 (CCR 1369–74, 306; PRO: E 179/141/20, 25, 28, 29, 30, 32, 33, 34 & 36; see also PRO: KB 9/185/2 m.79)
- SYMOND/SIMON, Richard, of Hackney, Middlesex**
 (probably father of John)
 moneyer
 1349 & 1352 subsidy exemption
 1349–1352
 (PRO: E 179/141/18 & 19)
- TOLLER, Hugh (I) (*d.* 1397) of Shoreditch, Middlesex**
 'monetarius de London', 'moneymaker'
 1383/4 & 1384/5 subsidy exemptions
 1383–1397
 (PRO: E 179/141/28 & 29; GL: MS 9051/1, f.57; CCR 1396–99, 115)
- TOLLER, Hugh (II) of Shoreditch, Middlesex**
 moneyer
temp. Edward IV, subsidy exemption
 (PRO: E 179/141/164)
- TOLLER, John (I) (*d.* 1380) of London, of Shoreditch, Middlesex ?and of Dorset**
 'moneour'
 1351 subsidy exemption
 1351–1380
 (CPR 1377–81, 320 & 533; PRO: E 179/141/19)
- TOLLER, John (II) of Hoxton, & of Haliwell Street, Shoreditch, & Islington, Middlesex**
 (son of William Toller)
 moneyer
 1382, 1392, 1393, 1401, 1414 & 1416 subsidy exemptions
 1382–1416
 (PRO: E 179/141/27, 33, 34, 36, 48 & 50; CCR 1399–1402, 399; GL: MS 9051/1, ff.113, 216, 218 & 225v; MS 9171/3 f.43; PRO: CP 25/1/152/92/113)
- TOLLER, John (III) of Shoreditch, Stoke Newington, Hackney & Haringey, Middlesex**
 moneyer; ?brewer
 1414 (junior) 1416 (junior) 1428 & 1437 subsidy exemptions
 1414–1444
 (Feudal Aids, iii, 379; PRO: E 179/141/48, 50 & 65; CP 25/1/152/92/113; KB 9/205/1 m.18)
- TOLLER, Nicholas of Shoreditch & Stepney, Middlesex**
 moneyer
 1437, 1446, 1453 & *temp.* Edward IV, subsidy exemptions
 1472, Parl. Attestor
 1437–1472
 (PRO: E 179/141/65, 78, 86 & 164, C 219/17/2; GL: MS 9171/6 ff. 20 & 34v)
- TOLLER, Thomas, of Shoreditch, Middlesex**
 moneyer
 1382, 1392, 1393, 1401, 1414 & 1416 subsidy exemptions
 1391–1416
 (PRO: E 179/141/27, 33, 34, 36, 48 & 50)
- TOLLER, Valentine, of Middlesex**
 moneyer
 1437 & 1446 subsidy exemptions
 1437–1446
 (PRO: E 179/141/65 & 78)

- TOLLER, William, (*d.* 1403) of Shoreditch, & Hackney, Middlesex
(father of John (II) Toller)
moneyer
1371, 1377, 1378, 1383/4, 1384/5, 1387, 1387/8, 1392, 1393 & 1401 subsidy exemptions
1371–1403
(CCR 1369–74, 306; PRO: E 179/141/20, 25, 28, 29, 30, 32, 33, 34 & 36; GL: MS 9051/1 f.113)
- WAPENHAM, John, of Middlesex
moneyer
1347 subsidy exemption
(PRO: E 179/141/12)
- WOOD, Hugh atte (*d.* 1375) of Shoreditch, Middlesex
(probably father-in-law of John Clopton)
?moneyer
pre 1375
(GL: MS 9171/1 ff.24v & 48)
- WYLLESMERE, William, of Tottenham, Middlesex
moneyer
1453 subsidy exemption
(PRO: E 179/141/86; and for *alias* see Halingbury)
- YONGE, John le (I) of Shoreditch, Middlesex
moneyer
1340/1, 1347, 1348, 1349 & 1351 subsidy exemptions
1340–1351
(PRO: E 179/141/9, 12, 16, 18 & 19)
- YONGE, John (II) of Shoreditch, Middlesex
moneyer
1377, 1378, 1383/4, 1384/5, 1387, 1387/8, 1392 & 1393 subsidy exemptions
- 1377–1393
(PRO: E 179/141/20, 25, 28, 29, 30, 32, 33 & 34; perhaps GL: MS 9171/2 f.303)
- YONGE, Peter le, of Shoreditch, Middlesex
moneyer
1340/1, 1347 & 1348 subsidy exemptions
1340–1348
(PRO: E 179/141/9, 12 & 16)
- YONGE, Richard le, of Shoreditch, Middlesex
moneyer
1340/1, 1347, 1348, 1349 & 1351 subsidy exemptions
1340–1351
(PRO: E 179/141/9, 12, 16, 18 & 19)
- YON [YONGE], William of Islington, Middlesex
moneyer
1428 subsidy exemption
(*Feudal Aids*, iii, 380)
- Addendum*
William Hyon and Richard Fygge
moneyers
1433
[PRO: E159/210, Recorda rot. 43d]
I owe this reference to Dr David Grummitt
- NOTE: It is not always possible to distinguish between moneyers of similar names, with overlapping dates.
- BL = British Library, London
CLRO = Corporation of London Record Office
GL = Guildhall Library, London
LMA = London Metropolitan Archives

TWO 'CROSRAGUEL PENNIES' FOUND IN GDAŃSK AND THE PROBLEM OF THEIR FUNCTION ON THE CONTINENT

BORYS PASZKIEWICZ

Translated by Agnieszka Harrison

*To Professor Philip Grierson
on his ninetieth birthday*

The only Scottish coins that had previously been found in the territory of the former Polish-Lithuanian state (nowadays: Poland, Lithuania, Latvia, Byelorussia and the Ukraine) are Charles I turners, which constantly appear in hoards and stray finds from the middle of the seventeenth century.¹ Older coins have only recently been recorded in Gdańsk, which was the biggest port city on the Baltic Sea during the fifteenth- to seventeenth-century period. Scottish copper coins minted under James III, called *Crux Pellit* pennies (formerly known as Crostraguel pennies) were found there twice in the 1990s. The first one was excavated in 1990 with other coins as a stray find in the mud at the bottom of the old port's dock, at the outlet of the Radunia Canal to Motława River.² The second one was found in 1996 in Stare Miasto district during archaeological research near the former 'Monopol' hotel, located between Podwale Grodzkie (former German name: Stadtgraben) and Korzenna Street (Pfeffer-Stadt).³ So far these are the only medieval Scottish coins to have been found in Poland.

The first of the two James III coins (Fig. 1) was bought for the numismatic collection in the Royal Castle of Warsaw at an auction in 1991. The obverse contains a regal orb, the curve of the central band projecting downwards, the arched band to the right, *ITCOBVS:DEI:GRA:REX:* between two circles of pellets. *Rev.*: the Latin cross in a quatrefoil, *\GRVX·PELLIT·OI* between two circles of pellets. It is corroded, 1.07 g, 19.6 mm.⁴ The inventory number is ZKW.N.6261.



Fig. 1. Scotland, James III, copper penny (so-called 'Crostraguel penny') from the collection of the Royal Castle in Warsaw (×2). Photo Włodzimierz Krzemiński.

¹ A. Mikołajczyk, 'Scottish Copper Coins of the Seventeenth Century Found in Poland and in the Neighbouring Soviet Republics', *NC* (1974), 148–57; however, I. Sinchuk, 'Торня Шотландского корольства в денежном обращении Речи Посполитої', *Aktualūs kultūros paminklų tyrinėjimu užduviniai* (Vilnius, 1988), pp. 85–90 interprets the phenomenon in a different way (which I believe to be more accurate).

² J. Dutkowski, 'Gdańsk, m. woj. – Kanał Raduni', *Wiadomości Numizmatyczne* 34 (1990), 66.

³ For more details see B. Paszkiewicz, 'Monety z badań archeologicznych średniowiecznego i nowożytnego Gdańska', *Pomorania Antiqua* [forthcoming].

⁴ Gdański Gabinet Numizmatyczny's Sale Catalogue No. 2, 23–24 February 1991, No. 983.

The second one (Fig. 2), along with the rest of the materials from the archaeological research, is kept in the Archaeological Museum in Gdańsk. The obverse was struck several times: the regal orb, the curve of the central band points downwards, the arched band to the left, \\\ACOBVS·D&D&E between two circles of pellets. The reverse was also struck several times: the Latin Cross in a quatrefoil, \\\CRVXR·VX·PELLIT·O&E between two circles of pellets. 2.04 g, 19.4 mm. The inventory number is MAG/N.2484.



Fig. 2. 'Crosraguel penny' from the collection of the Archaeological Museum in Gdańsk.

Although the reverse inscription *Crux pellit omne crimen* is undoubtedly a quotation from Prudentius' hymn sung at Vespers,⁵ the interpretation of *Iacobus Dei gracia rex* on the obverse, and consequently the attribution of the coin, has still not been confirmed to the satisfaction of every scholar. In nineteenth-century Scottish literature, such coins were presumed to be Scottish. Joachim Lelewel, unaware of this, attributed a specimen he knew to King Jaume I of Sicily (1285–95), later ruler of Aragon.⁶ However, A. Duchalais pointed out that the coin's design was later, and he suggested that it should be transferred to Jacques de Bourbon, the prince of Naples in 1415–16.⁷ The situation was further complicated by Christian Jürgensen Thomsen's collection, in which a similar specimen was published, which, however, had the name KAROLVS instead of IACOBVS.⁸ This *Karolus* was identified as Charles III of Durazzo, king of Naples (1381–6, as Charles II of Hungary, 1385–6).

The James coins were reattributed to Scotland by Sir George Macdonald through his extensive study devoted to the hoard found in the ruins of Crosraguel Abbey in Ayrshire.⁹ This included fifty-one *Crux Pellit* coins, and he pointed out that Crosraguel Abbey was generously endowed with Royal privileges, and that the design on the coins related directly to its name (Crosraguel = Cross Regal); he put forward the theory that they had been minted there during James III's reign. From that time on, the *Crux Pellit* coins have often been referred to as Crosraguel pennies. Macdonald also divided them into three distinct types, depending on the shape of the central band encircling the globe.

R.B.K. Stevenson demonstrated that Crosraguel Abbey could not have issued the coins, as it did not have minting rights, but he noted that James Kennedy, bishop of St Andrews, had received that prerogative from King James II, and that coins from that bishopric had not been identified so far.¹⁰ His reattribution was followed in later publications¹¹ until Joan E.L. Murray asserted that the *Crux Pellit* coins formed part of the royal coinage of James III, most probably struck after 1475.¹² An anonymous chronicler wrote in 1482, *Thar was ane gret hungyr and deid in Scotland, for the boll of meil was four pundis; for thar was blak cunye in the realm, strikkin and ordinyt be King James*

⁵ R. Kiersnowski, *Moneta w kulturze wieków średnich* (Warszawa, 1988), p. 325.

⁶ J. Lelewel, *Numismatique du moyen-âge*, vol. 3, Paris, 1835, 42, pl. XV:31.

⁷ A. Duchalais, 'Restitution à Jacques de Bourbon, roi de Naples, d'une pièce de billon attribuée jusqu'ici à Jacques I, roi de Sicile', *Mémoires de la Société des Antiquaires de France* 22 (1855), 180–90.

⁸ *Catalogue de la collection des monnaies de feu Christian Jürgensen Thomsen, directeur du Musée des antiquités du Nord, du Cabinet des Médailles &c.*, 2. partie, *Les monnaies du moyen-âge*, tome I (Copenhague, 1873), No. 2555.

⁹ G. Macdonald, 'The Mint of Crosraguel Abbey', *NC* (1919), 269–311.

¹⁰ R.B.K. Stevenson, '"Crosraguel Pennies" – Reattribution to Bishop Kennedy', *PSAS* 89 (1949–50), 109.

¹¹ I.H. Stewart, 'Unpublished Scottish Coins: III', *NC* (1958), 4; I.H. Stewart, *The Scottish Coinage* (London², 1967), p. 54; D.M. Metcalf, 'The Evidence of Scottish Coin Hoards for Monetary History, 1100–1600', *Coinage in Medieval Scotland (1100–1600). The Second Oxford Symposium on Coinage and Monetary History*, BAR 45 (Oxford, 1977), 16.

¹² J.E.L. Murray, 'The Black Money of James III', *Coinage in Medieval Scotland (1100–1600). The Second Oxford Symposium on Coinage and Monetary History*, BAR 45 (Oxford, 1977), 115–30.

the Thred, half-pennys and three-penny pennys, innumerabill, of coppir. And thai yeid twa yer and mair. And als was gret wer betwix Scotland and England, and gret distructioun throw the weris was of corne and catell. And thai twa things causyt baith hungar and derth, and mony pur folk deit of hungar.¹³ The three-penny pennys mentioned are probably *Crux Pellits*. This theory is supported both by the substantial number of these coins which have now been found, and by the large number of dies represented.¹⁴

The *Crux Pellit* coins are notable for their frequent occurrence as single finds and very infrequent appearances in hoards. Apart from the Crosraguel Abbey hoard, which seems to have some of the characteristics of a scrap-bronze store, two specimens were recorded in the inventory of the 259-coin hoard from Innerwick, a fact that surprised the scholars working on the documentation of the find so much that they were inclined to assume that the coins just happened to be in the same place as the hoard.¹⁵ Other distinctive features of the *Crux Pellit* coins are their presence on the Continent and their Continental imitations. Many other Scottish coins appear as Continental finds and they have many imitations, but they are never the 'black' coins.

The problem of the *Crux Pellit* coins with the name Charles has been studied by Joan E.L. Murray and Claire Van Nerom.¹⁶ They stated that *Crux Pellit* coins appeared not only as single finds in Scotland, but also in Flanders (Oostduinkerke, Koksijde, De Panne, Adinkerke, Damme, Deinze), and that the provenance of the eleven specimens without any find record, now in the Royal Cabinet of Medals in Brussels, may be similar. Among the pieces in the Belgian collection, seventeen specimens relate to the ones found in Scotland, whereas thirteen belong to a variety not found in British collections. Among the latter, five have the name Charles instead of James. The types recently found in Belgium, both *Carolus* and *Jacobus*, belong to type III according to Macdonald, bearing a rosette at the intersection of the bands which encircle the globe. However, they are made in a way which suggests that the die-sinker did not know what they represented. The outline of the globe was identified in the bead-moulded circle, and the cross above it became the initial mark of the legend and is separated from the globe and often misplaced. Such an ignorance of the meaning of the iconographic motif is characteristic of imitations. Thus, there are both original Scottish coins with the name James¹⁷ appearing in Scotland and Flanders, as well as the imitations with the name James or Charles, found in Flanders. Some *Crux Pellit* coins have also appeared in France (the finds in Théroutanne in Artois certainly belong to the Flanders series, but in the South-West of France others have also been found). However, the lack of photographic documentation prevented the scholars from establishing to which type they belonged. To sum up, the Scottish origin of the Crosraguel pennies cannot be doubted, but the variations found exclusively on the Continent are non-Scottish imitations. According to Mrs Murray, the designs, which are unusual for Britain, relate to the doctrine *rex imperator in regno suo*, passed by the Scottish Parliament in 1469 (obverse), and to the French *double tournois* (reverse). If the imitations appear not only in Flanders but also in remote regions of France, they could be a product of a regular mint belonging to one of the Burgundian dynasty's states ('éventuellement attribuable aux États bourguignons'). This perspective is further enriched by another imitation of a *Crux Pellit* coin mentioned by the same authors, which is most probably a *diner* or a token of Hug Roger III (1451–1502) from the Aragon county Pallars in the Pyrenees. It is a coin which repeats the reverse motif on both sides; in the inscription, it introduces its own legend *Comes Pallarensius* (also repeated on both sides).¹⁸ Thus, the imitation is more distant, but the relationship with the Scottish coin is beyond doubt.

¹³ Macdonald, as in n. 9, 273.

¹⁴ N. Holmes, *pers. comm.* See also lately: J.D. Bateson, *Coinage in Scotland* (London, 1997), p. 93.

¹⁵ D.H. Caldwell, J.E.L. Murray and M. Delmé-Radcliffe, 'Innerwick Hoard, 1979', *BNJ* 52 (1982), 132–50.

¹⁶ J.E.L. Murray and C. Van Nerom, 'Monnaies "Au globe et à la croix" appartenant à des collections belges', *RBN* 129 (1983), 91–118. I would genuinely like to thank Miss Marion M. Archibald and Rt. Hon. Lord Stewartby for pointing this publication out to me.

¹⁷ H.A. Seaby and M. Bussell, 'British Copper Coins and Their Values' (2nd edn, London, 1963), No. 5c7, mention also a variation with inscription *Crux* ... on both sides.

¹⁸ M. Crusafont i Sabater, *Numismática de la Corona Catalano-Aragonesa medieval (785–1516)* (Madrid, 1982), p. 66; A.M. Balaguer, *Història de la moneda dels comtats catalans* (Barcelona, 1999), p. 259.

The article by Murray and Van Nerom has significantly cleared up the problem with the identification of the *Crux Pellit* coins, although without answering a few important questions. For example, the authors' interpretation of the meaning of the designs on this coin is not satisfactory. Such a poor coin as the James III copper issue could not have served as inspiring propaganda for the ruler. The devotional motif on the reverse reflects the value of the coin far better. In the fifteenth century, the shortage of precious metal in a coin was frequently compensated for with an abundant expression of piety. The Danish copper sterlings of Eric of Pomerania are a good example, struck from 1422 with the invocation *In nomine Domini*.¹⁹ The origin of the Latin Cross in a quatrefoil is different from the one offered by the authors, and the reverse of the French *double tournois* is not similar to that of the *Crux Pellit* coins at all. However, significant similarity can be seen with the reverse of French *Salut d'or* coins (1421–33), where the Latin cross is placed inside a polylobe (a tressure of ten arches connected by lilies).²⁰ The objective of this reference might have been to make the Scottish penny appear more reliable. *Saluts* must have been still widely known at the end of the fifteenth century since they were recorded by a Scottish merchant, Andrew Halyburton, in 1495 and later.²¹ The regal orb on the obverse was probably intended to win more confidence in the coin – perhaps by association with the German goldgulden? However, it is worth admitting here that the way in which the regal orb is presented on Scottish coins differs considerably from that on the German ones. Probably, it was an original motif then, which through the emblem of royal sovereignty was intended to make sure that the coin's legal value significantly exceeded its intrinsic value. In summary, both sides of the coin, by calling up heavenly and earthly authority, were intended to convince people of its value.

There is also another fact that raises even more doubt; the coins imitated in foreign countries were mainly those of good quality, or at least these which were in wide circulation in those countries. Croisraguel pennies were poor coins and were devalued very soon. What is more, they only circulated in Scotland and not for long. This begs the question why they should be imitated on the Continent.

We still do not know which Charles's name appears on the imitative coins. Murray and Van Nerom thought that it was a fictitious character, or Charles VIII, King of France (1483–98). Sir Ian Stewart indicated that because the chronology of the Scottish originals was not certain, Charles VIII Knutsson, King of Sweden (1448–70, with interruptions) might be involved. However, because the coin suits neither the Swedish coinage, nor the French, 'the name *Karolus* was used to obscure its origin, rather than to identify it'. Apart from the places mentioned above, the Scottish *Crux Pellit* coins have also been found in the Netherlands.²² Therefore, it appears reasonable to agree with the conclusion of the present Lord Stewartby, mentioning here that the name Charles could have functioned in the same way as the emperors' coats of arms and crowns on the Nuremberg counters, and could have related to the royal aspirations of Charles the Bold, or even to his great grandson (born in 1500 and ruled from 1506). As opposed to the French and Swedish Charleses, they both ruled Flanders, where the imitations probably have been made, or at least used.

All this leads to the conclusion that the imitations of the Scottish *Crux Pellit* coins were not monetary coins, but items with a different purpose, perhaps the same as the Nuremberg counters (for reckoning on an abacus), or as jettons for games. The descriptions of the archaeological context of their findings support this conclusion; in Damme and Deinze they were found at the bottom of harbours, and although they were found near a church in Koksijde, they were still in the same context as three contemporary Nuremberg counters and two French ones.²³ Presumably, the

¹⁹ K. Bendixen, *Denmark's Money* ([Copenhagen], 1967), p. 50.

²⁰ J. Duplessy, *Les monnaies françaises royales de Hugues Capet à Louis XVI (987–1793)*, t. I (Paris–Maastricht, 1988), Nos 375, 433, 443, 457.

²¹ M.M. Archibald, 'Coinage in Andrew Halyburton's Ledger', *Studies in Numismatic Method presented to Philip Grierson* (Cambridge, 1983), pp. 282–3.

²² I. Stewart, 'Imitation in later medieval coinage: the influence of Scottish types abroad', *Studies in Numismatic Method presented to Philip Grierson* (Cambridge, 1983), pp. 310–11.

²³ Murray and Van Nerom, as in n. 16, 99, 101.

original Scottish coins were also used as counters on the Continent. Otherwise there would be no reason why the citizens of Flanders or France should be interested in these valueless coins at all. The conversion might have been facilitated by (or even triggered by) the devotional motif on the reverse. A devotion is constantly present on the contemporary counters, and legends such as *Ave Maria gratia plena, Dieu nous doin pais*, or later *Gottes Wort bleibt ewiglich* frequently appear on them.²⁴ What is more, the design of the Scottish coin's obverse, the regal orb, is one of the most frequent motifs put on counters, especially Nuremberg ones, where it had been taken from German goldgulden. That the latter element was not universally familiar is, however, clear from the fact that the maker of the *Karolus* imitation did not even understand the meaning of the representation.

On balance, it may be asserted that the reason for the imitation of the James III pennies was that they had become common as tokens or counters on the Continent.

However, the finds from Gdańsk were not imitations, but original Scottish coins of type I, according to Macdonald. The first Crosraguel penny was found in the port's canal. Between the fifteenth and sixteenth centuries, the Radunia Canal followed a different course, and at the site where the coin was found, there had once been a lateral channel of the Motława river at the entrance to the Gdańsk Port (see Fig. 3). As far as the literature is concerned, it is the very first find of a Crosraguel penny to the East of the Netherlands. Among the twenty-nine coin-shaped objects at the bottom of the canal, there were five coins that were never allowed to circulate in the city, and four counters. The second Crosraguel penny was found near the present railway station, in an area that has been reshaped many times; until the nineteenth century there were huge fortifications of seventeenth-century date. Before that, until 1635, there had been the foreground of the Corpus Christi Gate, built after 1433.²⁵ In the archaeological excavation, among the twelve coin-shaped objects, there were six coins that were not allowed circulation in Gdańsk, and one counter. They can be interpreted as items that had simply been dumped into the moat.

Trade between Gdańsk and Scotland became livelier from 1420 onwards. The material which Poland mainly imported was, of course, Scottish wool, and the exported articles were timber, cinder, tar, flour, malt, and even ready-made ships.²⁶ However, all this is not enough to explain these finds, because the trading was more intense between Gdańsk and Flanders or England, and there are not any coins from these countries in the city. In Scotland itself, more valuable coins than *Crux Pellit* pennies were struck, but there are none of these in Gdańsk. In the last quarter of the fifteenth century, all over Prussia, there appeared complaints about the wandering Scottish merchants; ... *manchfeldige handelunge geschen ist uf vil tageferten der Schotten unde partirers halben, die das landt mit irem gefelschten gutte, cromerey, vorkorcztem gewichte und kleynen mose durchziehen* ...²⁷ With a short break between 1501 and 1502, Gdańsk's authorities supported them and gave them civic rights.²⁸ In the Eastern suburb of the city, called Długie Ogrody (Langgarten), the Scottish Dam (Szkocka Grobla, Schottischer Damm) was built. Included in many complaints about the Scottish hucksters, they were accused of 'spoiling' the trading, i.e. cheap competition, but nobody accused them of spreading bad money. Apparently, the appearance of the Scottish pennies does not have anything to do with them.

I have not managed to find any traces of the Scottish money in Gdańsk in the written sources, but there is such evidence from Wrocław. In 1515, the Council of the Royal City of Wrocław announced that, *viel fremde Münze genommen und ausgegeben ist worden, darunter dann viel falsche Münze, als schottisch und ander böse schwarze Münze erfunden wird, dem Armut und gemeinen Nutz zu grossen Abbruch und Schaden*.²⁹ We do not know what kind of Scottish coins

²⁴ For other examples see: P. Grierson, *Numismatics* (Oxford, 1975), p. 164.

²⁵ M. Biskup, in *Historia Gdańska*, vol. I: *Do roku 1454*, edited by E. Cieślak (Gdańsk, 1978), p. 498.

²⁶ Biskup, as in n. 25, pp. 408, 524.

²⁷ The letter from the City Council of Toruń to the City Council of Gdańsk, 16 June 1488. *Acta statuum terrarum Prussiae Regalis*, vol. I, (1479–1488), edited by K. Górski, M. Biskup (Toruń, 1955), *Fontes*, 41, p. 530, No 269.

²⁸ H. Samsonowicz, *Historia Gdańska*, vol. II: *1454–1655*, edited by E. Cieślak (Gdańsk, 1982), pp. 150–1.

²⁹ S.B. Klose, *Darstellung der inneren Verhältnisse der Stadt Breslau vom Jahre 1458 bis zum Jahre 1526*, edited by G.A. Stenzel (Breslau, 1847), *Scriptores rerum Silesiacarum*, Bd. III, p. 75.

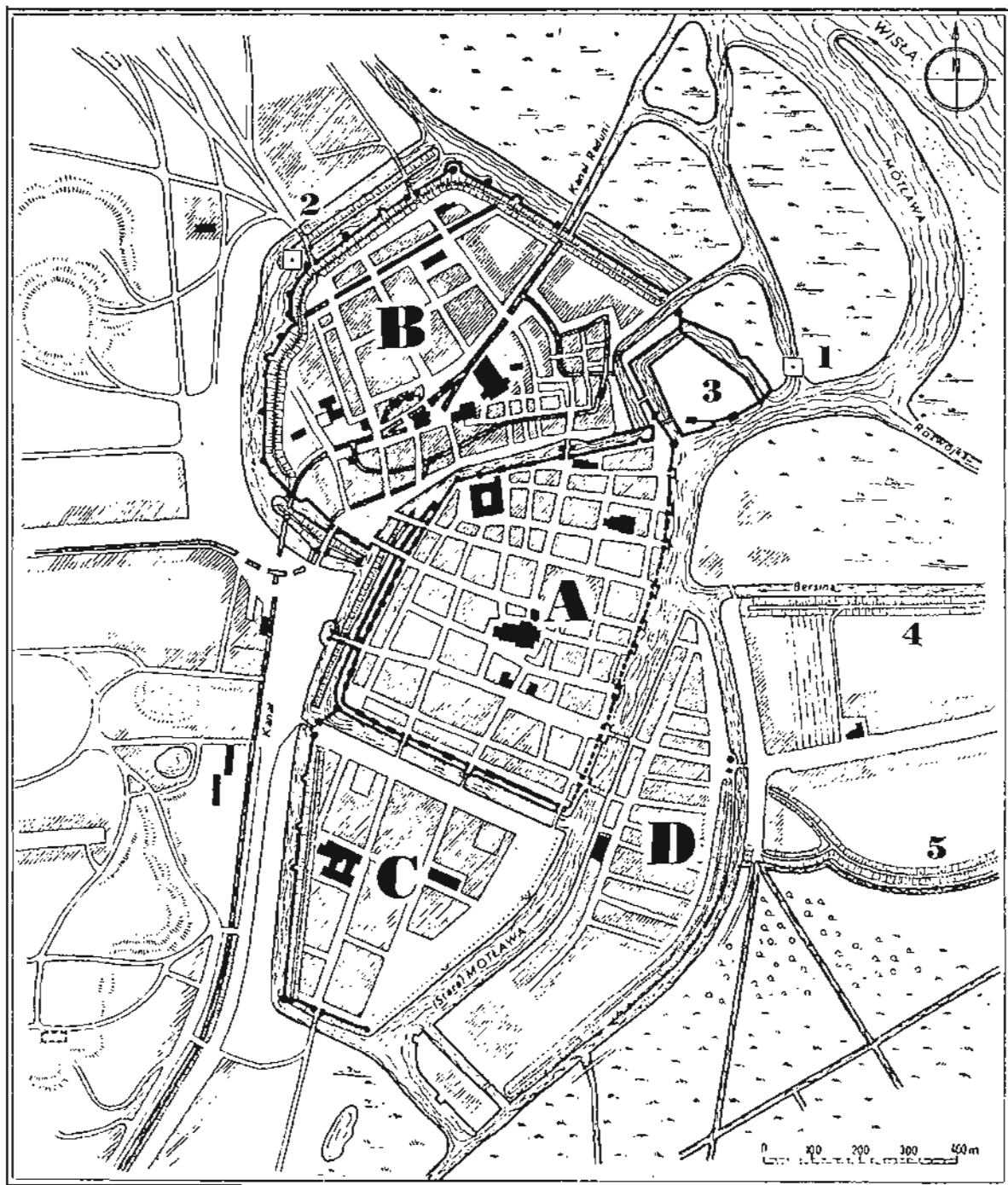


Fig. 3. Gdańsk, c. 1520 (reconstruction by J. Stankiewicz, 1982) and the sites where the *Crostraguel pennies* were found. 1 □ the site in the port's canal where coin no. 1 was found; 2 □ the site before the Corpus Christi Gate where coin no. 2 was found; 3. the ground of the ruined Teutonic Knights' castle (Das Alte Schloss, Zamczysko); 4. The English Dam (Englischer Damm, Angielska Grobla); 5. The Scottish Dam (Schottischer Damm, Szkocka Grobla). Parts of the Gdańsk City complex: A – The Right Town (Rechtstadt, Prawe Miasto), B – The Old Town (Altstadt, Stare Miasto), C – The Suburb (Die Vorstadt, Stare Przedmieście), D – Granary Island (Speicher-Insel, Wyspa Spichrzów).

the Council meant, as none have yet been found in Wrocław, and the epithet *böse schwarze Münze* might have applied to many coinages (in fact, no other Scottish 'black coin' but the *Crux Pellit* has been found on the Continent; but given how difficult it is to identify this coin as Scottish, and did the Wrocław City Council have such a deep numismatic knowledge?). If both Crosraguel pennies in Gdańsk were thrown away before the entrance to the city, they must have been treated in the same way as in Wrocław – as base black coins, which could not be brought into the city.

THE TOKENS OF THOMAS MYND

D.W. DYKES

FOR the second part of my Address I would like to return to the theme of eighteenth-century provincial coinage and its manufacturers, a subject I broached last year when I spoke about the work of John Gregory Hancock and the Westwood brothers and their joint concern in token-making.¹ This evening I would like to say something about the other Birmingham token manufacturers of the time and to concentrate on one of them in particular. Like Caesar's Gaul my talk is divided into three parts: some remarks about the manufacturers in general, then a few words about my principal subject, Thomas Mynd, and finally an examination of the tokens that are attributed to him. It is an exercise in reflection that, as you will see, raises more questions than it can answer.

The eighteenth-century token as a generally acceptable substitute for small-denomination currency owed its introduction to Thomas Williams, the copper magnate and originator of the 'Druid' pennies and halfpennies of the Parys Mines Company of Anglesey. His abandonment, in 1789, of the manufacture of these tokens and of the halfpennies he made for John Wilkinson to his arch-rival Matthew Boulton after little more than two years left the production of trade tokens in the hands of Boulton and Williams's own protégé John Westwood. Between them, Boulton and Westwood dominated the field for the next three years. At the outset, the money they produced continued to be rooted in the demands of industrial society but as it became more familiar to the public at large it rapidly extended from the masters of heavy industry to commercial enterprises in the ebullient sea-ports and manufacturing towns at the spearhead of the economic revolution.² Up to roughly 1792 vast quantities of so-called provincial coinage were produced for such customers. By the latter year, however, a sea change was taking place, both in the nature of the token itself and in the type of manufacturer.

Large-volume orders from manufacturing and commercial firms began to decline dramatically and new markets, centred primarily on the smaller country towns south of the Severn-Trent divide, began to be opened up by newcomers to the token-making trade. By now, the formerly coin-starved parts of the country were, on the whole, well served with tokens and the new men found it difficult to intrude into such areas. Even John Wilkinson could complain in November 1792 that there were 'so many private coinages on foot and so much interest used in circulating their different $\frac{1}{2}$ pence that I cannot vend in my own works one-fourth of what would have passed without trouble a year ago'.³

Note This paper, with footnotes now added, formed the second part of my Presidential Address to the Society in November 2000.

Acknowledgement My thanks are due to the National Portrait Gallery, London, and the National Maritime Museum for permission to reproduce the illustrations in figs. 4 and 10 respectively. I am grateful, too, for their help to Marjorie Bennett (Herefordshire Archives), Michèle Cosse (The Post Office Heritage Services), Val Loggie (Soho House), Richard Sabin (Natural History Museum), Liza Verity and Colin Starkey (National Maritime Museum), Graham Dyer and Charles Farthing.

Abbreviations BHM – Laurence Brown, *British Historical Medals 1760–1960* (London, 1980). Vol. I; D&H – R. Dalton and S.H. Hamer, *The Provincial Token-Coinage of the 18th Century* (Privately printed in 14 parts 1910–18); DNB – *The Dictionary of National Biography*; GM – *The Gentleman's Magazine* (London, 1731–1922); W – Paul and Benté Withers, *British Copper Tokens 1811–1820* (Llanfyllin, 1999).

¹ 'John Gregory Hancock and the Westwood Brothers: An Eighteenth-Century Token Consortium', *BNJ*, 69 (2000), 173–86.

² For the transfer of token manufacture from Thomas Williams to Matthew Boulton, see David Vice, 'The Soho Mint & the Anglesey Tokens of the Parys Mine Company', *Format*, 33, 2–9; and for Boulton's token making, Richard Doty, *The Soho Mint & the Industrialization of Money* (London, 1998), especially pp. 297–339.

The halfpence of the merchants Thomas Worswick (Lancaster), Thomas Clarke (Liverpool) and Gilbert Shearer (Glasgow) are examples of this development.

³ From a letter of 26 November 1792 to Matthew Boulton quoted in W.H. Chaloner, 'New Light on John Wilkinson's Token Coinage', *Seaby's Coin and Medal Bulletin*, No. 362, July 1948, 308, as a Birmingham Public Reference Library document. A recent search among the Boulton and Watt Papers and the Matthew Boulton Papers currently in Birmingham City Archives has been unable to identify this source.

What the new men, with William Lutwyche (1754–c.1801) and Peter Kempson (1755–1824) very much in the van, were to tap was an outlet among local shopkeepers and dealers largely in the south-east where they exploited an urban custom based primarily on the manufacture of comparatively low-volume issues. Tokens became as much ‘supply-’ as ‘demand-led’, and a peddled rather than a commissioned commodity. Riders or travelling salesmen, equipped with pattern books, were sent out from Birmingham to drum up business. The evidence of the tokens themselves, for instance, shows that during 1794 Lutwyche was undertaking a concerted sales campaign in Kent and Sussex, securing orders in at least eighteen towns and villages. Indeed, it is not too fanciful to trace his agent’s route from Canterbury to Sandwich or Deal, along the coast to Hastings, and thence back through the Weald to Maidstone. At the same time Kempson was developing a not dissimilar clientele in East Anglia.⁴

It is in this context that we must view the activities of the Birmingham token makers recorded in the table of die-sinkers and manufacturers that Charles Pye included in the quarto edition of his *Provincial Coins and Tokens*.⁵ Here he lists seventeen *manufacturers*: Matthew Boulton; Thomas Dobbs; John Gimblett; James Good; John Gregory Hancock; Bonham Hammond; [John] S[tubbs] Jordan; [Joseph] Kendrick; Peter Kempson; William Lutwyche; William Mainwaring; [Joseph] Merry; Thomas Mynd; James Pitt; Samuel Waring; [John] Westwood, senior; [John] Westwood, junior. Strangely, he omits three referred to in his detailed ‘Index to the Provincial Coins’ that follows a few pages later: R B Morgan; William Simmons; and Obadiah Westwood.

For reasons I gave last year I believe we should remove from this list the artist and die-sinker, John Gregory Hancock, except in so far as he was a ‘partner’ of the Westwoods. We should possibly also remove William Mainwaring who, although a plated-buckle-maker, seems, except for his early medallion work, to have worked largely for Lutwyche. On the other hand, we should probably add William Whitmore, the machine maker, who, on the evidence of Miss Banks, was responsible for some at least of the halfpennies of the Birmingham Mining and Copper Company given by Pye to Kempson.⁶ Miss Banks’s intervention should give us some pause in accepting Pye’s attributions too blithely. It may imply a greater complexity to token manufacture than his apparently *ex cathedra* pronouncements have traditionally led us to believe. It may, for instance, indicate an element of subcontracting that could help to explain some of the edge-oddities that occur among the tokens; a subject I hope to turn to on another occasion.

Of the manufacturers listed in Pye only one (Lutwyche) describes himself in contemporary directories as a ‘provincial coin’ maker and indeed produced halfpennies and farthings specifically to publicize his trade.⁷ Two are copper rollers and dealers in metals (Dobbs and John Westwood, the latter also a ‘general manufacturer’ as was Boulton), two are buckle-makers (Mainwaring and Merry), two are toy-makers (Mynd and Simmons), one is a locksmith (Pitt), and seven, understandably, are button-makers (Gimblett, Good, Hammond, Kendrick, Kempson, Morgan and Waring). All had access to hand-operated machine tools, especially presses which, even by the 1750s, had become fairly refined implements – Whitmore and Company, in fact, made them, supplying large machines to Thomas Williams in the early days of token-making – so that even if coining was peripheral to their main businesses everyone of them would have had suitable minting equipment readily available.⁸ Its ubiquity in the Birmingham toy trade was, of course, an explanation for ‘Brummagem’-s dire reputation for illicit coin making.

What emerges from an analysis of Pye is that apart from Kempson and Lutwyche – together with Boulton and the Westwoods whom I have excluded here – the separate issues made by these

⁴ See, for example, the letter from Samuel Garbett to Lord Lansdowne in December 1794 (British Library: Shelburne 19, f. 87) and the report to the Home Secretary in March 1794 of the activities of a travelling salesman in the Chester area (Copy of a letter from Thomas Griffith to Henry Dundas in Public Record Office: MINT 1/14, pp. 243–4). The ‘sales campaign’ of Lutwyche and Kempson in the south-east and East Anglia was remarked upon by the late John Brand in a paper given to the Society in April 1973. When delivering my Address I was not aware of this important lecture which was subsequently drawn to my attention by Graham Dyer.

⁵ Charles Pye, *Provincial Coins and Tokens, issued from the Year 1787 to the Year 1801* (Birmingham, 1801), [p. 2].

⁶ [Sarah Sophia Banks], *Ms Catalogue of Coin Collection*, VI – Tokens, p. 186; BM, Department of Coins and Medals, Arc R 19.

⁷ D&H: Warwickshire 219 and 482. Kempson described himself as a ‘Maker of Buttons, Medals &c’ on his Birmingham ‘Buildings’ series of tokens: D&H: Warwickshire, pp. 280–3. The trade descriptions cited in this paragraph are taken from contemporary Birmingham directories. Jordan cannot be identified from these sources as a token manufacturer. His first appearance in the directories is in 1797 as a manufacturer of iron window-frames. I have omitted from my list Obadiah Westwood and his son, John Westwood, junior, because of their involvement in the elder John Westwood’s business activities.

⁸ Eric Hopkins, *The Rise of the Manufacturing Town: Birmingham and the Industrial Revolution* (Stroud, 1998), pp. 7–9.

people was quite limited.⁹ In counting specific issues Kempson and Lutwyche far and away lead the field with something like 72 and 75 issues apiece. For the rest the count is: Dobbs, 2; Gimblett, 1; Hammond, 1; Good, 13; Jorden, 4; Kendrick, 4; Mainwaring (if he did strike his own tokens), 4; Morgan, 1; Mynd, 6; Pitt, 4; Merry, 1; Simmons, 1; Waring, 3; and Whitmore, 1. Furthermore, with the exception of Mainwaring and Whitmore, most of these manufacturers do not appear on the scene until quite late on: Dobbs in 1794–95 (an entrance probably associated with the run-down of the Westwoods' business); Hammond not until 1797; Good 1795–97; Jorden 1795–96; Kendrick 1796–97; Pitt 1796–97; Merry 1795; and Waring 1793 and 1795. John Gimblett and Thomas Mynd are the odd ones out, Gimblett being apparently responsible for the Birmingham Overseers half-crown as early as 1788 and Mynd for the Basingstoke Canal token a year later. Gimblett's half-crown is his only recorded production while Mynd's shilling stands out because the remainder of his tokens straddle the years from 1794 to 1797. These particular tokens are remarkable too because of their high-value denominations for copper pieces.¹⁰

I am afraid that there is little that one can unravel about the actual individuals listed by Pye. Even Boulton, despite his extensive archive, is, as a person, an elusive figure and the others are almost beyond history, virtually unknowable members of a stratum of society that, living a generation or two before the age of bureaucratic enquiry, left little record of themselves.

Thomas Mynd is just such a denizen of this 'Land of Missing Persons'.¹¹ A prime example of a group who were for the most part quite modest workshop masters what we actually know about him can be compressed into little more than a paragraph.¹² We do know that he was born in Ross-on-Wye in Herefordshire in 1741, the son of William Mynd, a local attorney, whose family had been long established as yeoman farmers in the marchland bordering Monmouthshire. The elder Mynd was a man of some substance and at his death in 1769 he left four sons: William the eldest who succeeded to his father's practice; John, a Ross ironmaster with iron-making interests in the Forest of Dean as well; Philip, described as 'gentleman' and farming the family estates outside Ross; and Thomas the youngest son. Thomas, who received a settlement of £500 and the expectation of a share in the profits of the ironworks, was already in Birmingham. It seems clear that with the prospect of a limited patrimony he had been put to a trade. He does not appear in any Birmingham directory, however, until 1787 when he emerges as a toy-man in Whittall Street, off Steelhouse Lane, where he followed this trade until his death in June 1799. One can only speculate that in the interim, from beginnings as a Birmingham apprentice, he had spent much of the time as a journeyman toy-maker in some other master's workshop.

In his will, proved for under £300, he left everything to his wife Sarah and a daughter of the same name. What is interesting, however, is that Sarah Cox, a widow, was Mynd's second wife whom he married only in 1797. Although there is a virtual blank in Mynd's Birmingham biography before 1787, we do know that in January 1762 he married Catherine Boulton, the sister of Matthew Boulton, who bore Mynd at least five children between 1763 and 1771. In January 1762 Mynd would have been barely twenty-one but would presumably have just completed an apprenticeship to enable him to become a journeyman and marry. The possibility is that his articles had been with the Boultons but we do not know. Nor do we know what happened to Catherine Boulton but the Mynd/Boulton familial connection was a close one and the eldest daughter Ann Mynd was companion to Boulton's invalid daughter (also Anne) and housekeeper at Soho House from about 1787 until she married in 1794. She is the 'Miss Mynd' frequently referred to in the Boulton papers. By all accounts Ann Mynd was not well liked; she was opinionated, regarded herself as

⁹ I must stress here that I have included only genuine provincial coins and shop tickets that probably also circulated as small change, discounting private, overtly medalllic or specious pieces. No distinction of die varieties or separation of repeated batches of the same token have been made.

¹⁰ The Birmingham Workhouse pieces are *sui generis* and were probably never intended for circulation as currency. There are specimens in silver, white metal and brass as well as copper.

¹¹ The phrase comes from *The Forest and the Fort* (London, 1943) by Hervey Allen (1889–1949), the American historical novelist, himself now a largely forgotten figure though immensely popular in his time: 'The past is the Land of Missing Persons, and it is only by a combination of diligence and good fortune that anyone who is not monumentally remembered can be found there' (p. 13).

¹² The biographical data in this and the next paragraph are based on material in the Herefordshire Archives and Birmingham City Archives; see also Eric Delieb, *The Great Silver Manufactory: Matthew Boulton and the Birmingham Silversmiths 1760–1790* (London, 1971), *passim*, for some information about the Mynd family.

the 'mistress' of Soho House, and her treatment of her cousin was not as it should have been. Charlotte Matthews commented to Boulton that she wished her no greater harm than a husband to take her off the manufacturer's hands.¹³

And that really is about all that at present we can say about Thomas Mynd; a blurred picture of a younger son of a rising middling-sort of provincial family, put to a trade in a burgeoning industrial town, marrying into what was to become a successful manufacturing family but somehow at the end of the day never seeming to fulfil his potential and frequently exuding an air of fecklessness. What then of the tokens of this unfulfilled toy-maker? Clearly, they were very much a sideline to his main business, unless this was even more straitened than one would imagine, for he struck only six distinct issues. They were, though, productions that, despite their generally mediocre manufacture, would have gladdened the heart of James Wright of Dundee when he first saw them, for they illustrated all the energy and sense of progress of later eighteenth-century Britain, capturing, in their themes, the nation's commercial development, its growth of communications, improving lifestyle and, underlying all, the strength of its naval power.¹⁴ But each of the six presents in its own and different way a variety of problems.

The first of Mynd's tokens conveys, very directly, the sense of the industrial token, for it lies at the heart of the early enterprises that did much to advance the dramatic economic evolution of Britain in the latter part of the eighteenth century. This is the Basingstoke Canal shilling (Fig. 1).

The Basingstoke Canal, built at the height of the canal mania that swept the country in the early 1790s, extended some 37½ miles from Basingstoke to the river Wey navigation near Byfleet.¹⁵ It was intended, through this link with the Thames, to open up northern Hampshire to London bringing up timber, malt and grain to the metropolis and returning coal, groceries and household goods as down traffic. It was begun in 1788 and eventually completed in 1794, some two years late because of administrative mismanagement and persistent debt. It has been suggested that the canal 'proved of great value to Basingstoke and the adjoining country'.¹⁶ The reality is that it was almost bankrupt from the start, never developing much more than an essentially agricultural traffic and failing to carry the tonnage or earn the tolls that its projectors had estimated; the problem was that it could not compete with an improving road system either in terms of cost or speed. Ironically, years later, it did have something of an Indian summer carrying material for the building of the London and Southampton Railway but this very business bore the seeds of the canal's own destruction.

The canal token is a piece of diameter (30 mm) a fraction larger than that of a normal provincial halfpenny but its weight is much greater, on average being 13.8 g. Its obverse bears the design of a sailing barge carrying a large tree trunk and other goods and the reverse a spade and mattock in a wheelbarrow, apposite designs for a trading link intended to furnish London with timber for the navy and for a highly labour-intensive scheme dependent on the simplest of tools and the brawn of a myriad of navvies. The obverse die has an obvious correction to the date where the die-sinker ('Wyon') has altered an original '8' to a '7', a correction common to all the specimens I have seen. Its edge is engrailed with what has been described as an overlapping feather¹⁷ but which seems to me more likely to have been intended as a flowering plant.

James Wright was told that the token was actually a medal struck for Pinkerton, the 'canal company secretary', for presentation to each 'proprietor of the canal stock'.¹⁸ Pye, on the other hand,

¹³ I am indebted to Val Loggie, Curator of Soho House, Birmingham, and Fiona Tait of Birmingham City Archives for information about Ann Mynd. Charlotte Matthews's opinion (MBP 325/6) was shared by Mrs Watt. Boulton seems to have been more than generous to the Mynd family and their ever impecunious father whom he supported with at least one largish loan (MBP 245/331-3).

¹⁴ James Wright (writing as 'Civis') aired his views on token design in *The Monthly Magazine and British Register* (December 1796), pp. 868-9. This article was a conflation of views already published in *The Edinburgh Magazine* (February 1796), pp. 131-4 and (May 1796), pp. 325-6.

¹⁵ For the Basingstoke Canal, see P.A.L. Vine, *London's Lost Route to Basingstoke* (Stroud, 1994), especially pp. 16-40, and Edward W. Paget-Tomlinson, *The Complete Book of Canal & River Navigations* (Wolverhampton, 1978), pp. 93-4.

¹⁶ [Richard Thomas Samuel], *The Bazaar, The Exchange and Mart* (22 June 1881), 639. Samuel's canard is repeated in R.C. Bell, *Commercial Coins 1787-1804* (Newcastle upon Tyne, 1963), p. 46.

¹⁷ Bell, as in n. 16. Interestingly at least two of the Pinkerton brothers had backgrounds in horticulture that may have been a family craft.

¹⁸ *GM* 1797, Part I (January), 33; Pye, as in n. 5, p. 6; Thomas Sharp, *A Catalogue of Provincial Copper Coins ... in the collection of Sir George Chenwynd* (London, 1834), p. 2; [Samuel], as in n. 16; [Hamer] in *D&H*, Vol. 1, p. 39; Vine, as in n. 15, p. 31. No numismatic authority, contemporary or modern, makes any reference to the existence of silver versions of Pinkerton's shilling which are almost certainly apocryphal. Arthur W. Waters (*N. Circ.*, July 1901, 474) concurs with Wright on grounds of condition and value.



Fig. 1. The Basingstoke Canal Shilling [D&H: Hampshire 1].

suggested that it was 'circulated among the workmen employed in cutting the canal' as a form of wages. Sharp echoed Pye. Hamer, following Samuel, conflated the two theories. The token, he noted, was 'said to have passed current among the workmen engaged in making the canal. John Pinkerton was the Secretary, and doubtless several of the early impressions would be given to shareholders and others, who would naturally be interested in the undertaking and also in the novel local currency'. Prima facie, Hamer's conclusion would seem to be a sensible solution. The standard authority on the history of the canal claims that the tokens were issued to the canal navvies as part wages redeemable, for instance, at the George Inn at Odiam where the canal contractors had their operational headquarters. No doubt, too, they could have been given away as curiosities and the same authority hints at the existence of silver versions that, in the unlikely event that they ever were produced, may have been presentation issues.

Pinkerton's shillings are by no means common today and even in Wright's time (1796) specimens were costing collectors several shillings each.¹⁹ Most extant specimens exhibit little wear and there appear to be only a single obverse and reverse die. They obviously saw little use and were never issued in the quantity that a labour-intensive operation would have required. If they ever were intended as currency their circulation probably met with resistance because of their perceived inflated value in comparison with other weightier but lower denomination tokens like the 'Druid' pennies and their issue was quickly abandoned. What is more likely, though, is that Pinkerton's shillings were never intended for the payment of wages and that Wright's informant was much nearer the mark in suggesting that they were presentation pieces. More of this in a moment.

Whatever their true purpose Pinkerton's shillings were never issued by the canal company itself. Nor was John Pinkerton the company's secretary. The practice with most canal developments seems to have been to appoint a local attorney as secretary to the promotional committee or board of directors. This is what happened at Basingstoke where a local lawyer, Charles Best (1748–1816) who was also the Town Clerk, held the office on a part-time basis for nearly forty years.²⁰ So who then was John Pinkerton? Canals were built by contractors who, working under the direction of a supervising engineer responsible for the canal's design, hired and paid their own workforce. This was the case here. William Jessop (1745–1814), perhaps the greatest expert on canal construction of his time, was the engineer and surveyor appointed by the company while John Pinkerton (d. 1813), a Yorkshireman and one of several brothers who were among the foremost canal contractors of the day, was the main contractor for the scheme. In fact the Pinkertons were the biggest and best-known firm of early canal contractors, the only eighteenth-century concern to take on countrywide contracts. John Pinkerton, an early member of the Smeatonian Society like Jessop, was the family member the engineer best liked and trusted and was someone on whom he had relied already for a variety of projects since the 1770s. Pinkerton was thus the man on whom the day-to-day construction of the canal and the organization and payment of its labour force depended.²¹

¹⁹ *GM*, as in n. 18. Wright's opinion was that Pinkerton's shillings were 'RR' – 'the second degree of scarcity in coins'. Pye, as in n. 18, classified them as 'r'.

²⁰ Vine, as in n. 15, *passim*.

²¹ For Pinkerton, see Paget-Tomlinson, as in n. 15, pp. 346–7; and Charles Hadfield and A.W. Skempton, *William Jessop, Engineer* (Newton Abbot, 1979), especially pp. 19–20.

Pinkerton's token is dated 1789 and for a long time I have worried whether this is a commemorative date or its actual date of issue. The canal was begun in the autumn of 1788 and the date fits in with what would have been a critical period for Pinkerton in organizing the wage requirements of his navvies – male and female – or, indeed, alternatively, of publicizing his contract among the canal subscribers. Pinkerton came to Basingstoke from Birmingham where he had been working on the Birmingham and Fazely Canal and promissory tokens would have been well known to him. But why approach Mynd? Why not John Westwood or Matthew Boulton? They were, after all, the only producers of this form of currency at the time. Perhaps he did approach Boulton who directed him to his brother-in-law either because Boulton was too busy with his other coinage projects or because he was mindful of the latter's need for work, having set up in his own business only two or three years before. A more tenable hypothesis to me, however, is that, despite its declared date, the token was in reality a product of the mid-1790s falling within the period when Mynd is known to have been manufacturing such pieces. The summer of 1794 marked the completion of Pinkerton's work on the Basingstoke Canal and it would have been appropriate at this juncture for him to have presented the canal proprietors with a memento of his constructional skills over the previous five years or so. But, for the present in the absence of concrete evidence, this must be conjecture, though a date approximating to 1794 would be more credible if the die-sinker was, as Pye says, Thomas Wyon.

As a pure aside, I would just mention that it is said that when the canal was being dug through the grounds of Basing House a local watchmaker discovered a cache of 800 'guineas' reputed to have been buried during Cromwell's siege of the house. I have, though, found no contemporary corroboration of this find of gold coins whatever they were.²²

Mynd's next venture into token work can definitely be dated to 1794 and takes us away from the industrial token – even if in sense only – to the phase of the shopkeeper's ticket. Mynd's second token, a standard halfpenny (again engraved by 'Wyon'), was ostensibly struck for an 'I Fowler', payable in London (Fig. 2). The mystery here is who actually was Fowler. Samuel suggests that he was a John Fowler, an oil merchant and tinsmith worker of 78 Long Acre 'but the fact is not free from doubt'. I have not been able to establish the source of Samuel's identification but the iconography of the token would accord with its issue by such a tradesman.²³



Fig. 2. John Fowler's Halfpenny [D&H: Middlesex 306].

The token is of the usual halfpenny diameter of 28 mm with an average weight of 9 g. The obverse of the token is graced with a head of Neptune – which Samuel considered to lack the sea god's majestic mien and to be more reminiscent of an ordinary Jack Tar (his hair and beard being 'of such very modest growth') – and the reverse with a whaling scene. Whale oil, it must be stressed, was an essential commodity to late-eighteenth century living especially in the newly burgeoning urban communities. The lighting of streets, of houses, factories and shops had increasingly come to depend on it. As early as the 1740s five thousand street lamps, burning whale oil, had been introduced into London. Whale oil was used in the manufacture of soap, varnishes and paint, of cordage and in the preparation of coarse woollen cloth such as the military serges that

²² The supposed find is referred to in Vine, as in n. 15, p. 30. A 'Saxon idol' was also said to have been found during the excavations of the canal basin at Basingstoke: Arthur Freeling, *Guide to the London & Southampton Railway* (London, 1839), p. 79.

²³ [Samuel], as in n. 16, 28 June 1882, 685. There was a William Fowler, an oilman with premises in Grays Inn Lane, whose son John (born in 1756) may well be Samuel's man.

were much in demand at this period. And, of course, in the new machine age it had an extensive and increasing usage as a lubricant.²⁴

Fowler's trade as an urban oilman would have been concerned primarily with the domestic market, with the provision of paints, putty and varnishes but particularly with the sale of lamp oil and candles though he might well have been a street-lighting contractor, too. Perhaps one of those London oilmen who were to be so bitterly obstructive to the introduction of public gas lights a few years later. Among his domestic supplies he would have included spermaceti candles, generally held to be superior to the old-fashioned tallow sort because of their lack of smell, better illumination and duration.

And this brings us back to the token. The appearance of Neptune may simply be intended to add to its nautical flavour. But his conjunction with the whaling scene, if deliberate, might well suggest a source of oil in the Southern whaling grounds that in the aftermath of the American War and the colonization of Australia had become of importance to Britain, partly because of the existence of the sperm whale producing the valued spermaceti but also because of the large aggregations of the right whale, *Eubalaena glacialis*, which in the 1790s accounted for something like a third to a half of all whale-oil imports.²⁵ It is, in fact, a right whale that is shown on the token. It has two spouts – not as a recent commentator has said 'an element of artistic licence'²⁶ – but, rather, although highly stylised, an attempt on the part of the die-sinker to capture the effect of the bushy V-shaped double-jet that characterises the right whale.²⁷ The scene is no doubt reasonably accurately reproduced in small-scale from a contemporary print but it presents a falsely placid picture of a desperately dangerous calling. Seconds later the scene might have become very different as the stricken whale tried to shake off its pursuers (Fig. 3).

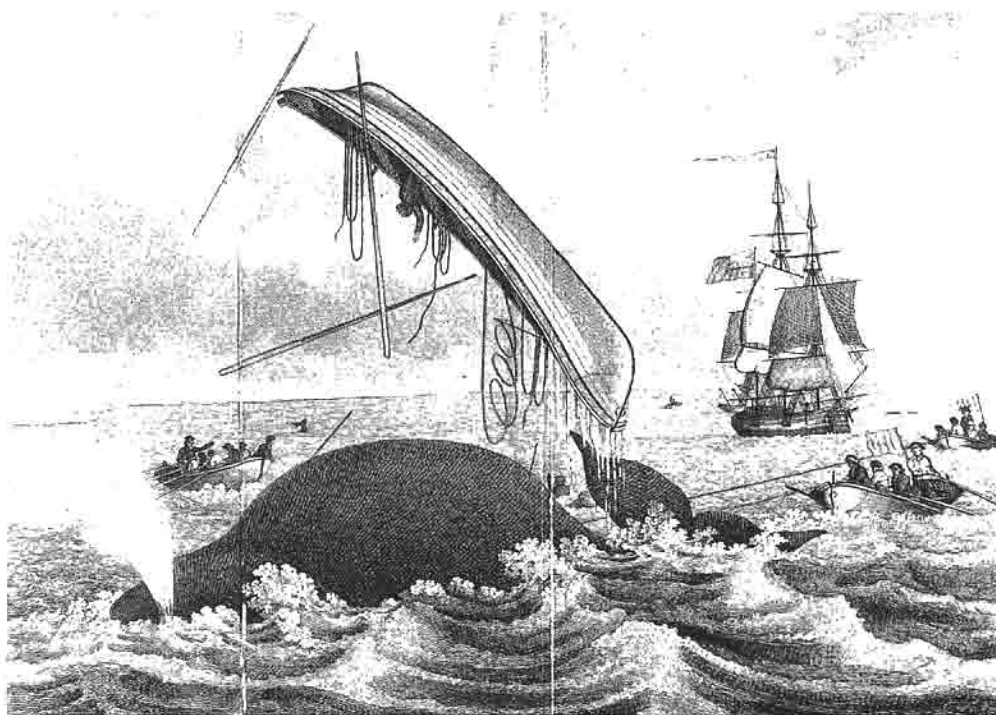


Fig. 3. Dangers of the Whale Fishery [Engraving by W. & D. Lizars after James Waddell]. (From W. Scoresby, *An Account of the Arctic Regions*, 1820.)

²⁴ W. Scoresby, *An Account of the Arctic Regions, with a History and Description of the Northern Whale Fishery* (Edinburgh, 1820), Vol. II, pp. 420–1; and Gordon Jackson, *The British Whaling Trade* (London, 1978), pp. 55–6.

²⁵ For the development of the Southern Whale Fishery at this time, see Jackson, as n. 24, pp. 91–116; and Vincent T. Harlow, *The Founding of the Second British Empire*, (London, 1964), Vol. II, pp. 293–328. The right whale was also important for its whalebone or baleen used for the stiffening of ladies' garments, carriage whips, fishing rods, &c., and brush bristles.

²⁶ Michael Mitchiner, *Jetons, Medalets and Tokens*, Vol. III (London, 1998), p. 2003.

²⁷ Nigel Bonner, *Whales of the World* (London, 1989), p. 51.

Spermaceti brings us to our next token or rather series of three; for, among his other activities, the father of the man they commemorated was a chandler and spermaceti merchant in Bath besides having interests in the theatre and a brewery. Thomas De Quincey tells us that the son, John Palmer (1742–1818, Fig. 4), ‘accomplished two things, very hard to do in our little planet. ... he had invented mail coaches and he had married the daughter of a duke’.²⁸



Fig. 4. John Palmer, 1793 [Pencil Drawing by George Dance: courtesy of the National Portrait Gallery, London].

The second achievement, in any case unfounded, need not detain us. The first, however, must because it was in recognition of his introduction of the mail coach and his reform of the transmission of the mail that this series of tokens was struck. There were three distinct types, two are undated and the third, a smaller and thinner piece, is dated 1797 (Fig. 5). The undated pieces conform to the normal halfpenny diameter of 28 mm and on average weigh 8.75 g, the dated piece being 27 mm and weighing 7.5 g. The obverse, broadly common to the three, depicts a mail coach travelling at speed with variations of an essentially similar legend, the dies of the dated halfpenny being fairly faithfully copied from the ‘JF’ token. Despite the vigour of the coach scene the dies are not skilfully engraved (by ‘Wyon’ again, according to Pye), particularly those of the ‘AFH’ token and especially with regard to the lettering.

Pye does not help us over the dates or the issuers of the undated pieces. With regard to the dates we can get some pointers from contemporary catalogues. John Hammond’s first catalogue, that supposedly edited by the fictitious ‘Christopher Williams’ – actually Hammond himself – which was published in early 1795 records only the ‘JF’ token. Spence’s catalogue, published slightly later but certainly available by the middle of May 1795, records both the ‘JF’ piece and the ‘AFH’ halfpenny. Hammond also includes both in his second edition that had come out by August 1795 and both dealers noted that the ‘AFH’ tokens were ‘NEW’. We can actually pin these two pieces down even closer through the help of the indefatigable Miss Banks for she tells us exactly when she acquired her specimens: January 1795 for the ‘JF’ and May of that year for the ‘AFH’ halfpenny. Thus we can reasonably date and put in order the three distinct issues: 1794/95 for ‘JF’, the spring of 1795 for ‘AFH’ with a gap of two years before ‘1797’ appeared.²⁹

²⁸ Thomas De Quincey, *The English Mail-Coach and Other Essays* (London [Everyman Edition], 1912), p. 1. A case of mistaken marital identity: Lady Madeline Gordon, the lady concerned, in fact married Charles Fishe Palmer, no relation to John Palmer.

²⁹ ‘Christopher Williams’ (John Hammond), *A Descriptive List of the Provincial Copper Coins* (London, 1795) – purchased by Miss Banks 7 May 1795; [Thomas Spence], *The Coin Collectors’ Companion* (London, 1795) – purchased 16 May 1795, John Hammond, *The Virtuoso’s Guide in collecting Provincial Copper Coins* (London, 1795) – purchased 15 August 1795. The dates of Miss Banks’s purchase of the catalogues are inscribed by her in her copies and library catalogue now in the Library of the Royal Mint.



Fig. 5. The Mail Coach Halfpennies [D&H: Middlesex 363.366 and 364].

What Miss Banks does not do is to identify 'JF' and 'AFH'. Nor does any contemporary cataloguer. Hamer connects the initials 'AFH' with Anthony Francis Haldimand, a London merchant, while others attribute 'JF' to a contemporary engraver, James Fittler. Neither, at first sight, has an obvious relationship with Palmer and Waters dismisses Hamer's attribution out of hand.³⁰ There is some case to be made for Fittler, though. For he engraved George Robertson's famous painting of the Bath Mail (Fig. 6) and dedicated the engraving to Palmer in words that some commentators have taken as being reminiscent of the tokens:

*To John Palmer Esq^r Surveyor and Comptroller General of the Post Office:
This Plate of the MAIL COACH is respectfully Inscribed
By his obedient humble Servant, James Fittler.*



Fig. 6. The Mail Coach (Engraving by James Fittler from the oil painting by George Robertson).

³⁰ [Hamer], as in n. 18, [Middlesex 'Introduction to the Halfpenny Section']; Bell, as in n. 16, p. 113; Arthur W. Waters, *Notes on Eighteenth Century Tokens* (London, 1954), p. 14.

George Robertson died in 1788 but we do not know when the engraving was done. The published version was not put out by the Islington print-seller Robert Pollard until 1803. Yet the fact that it refers to Palmer as 'Surveyor and Comptroller General of the Post Office' implies that it was executed before or about 1793 when he was dismissed from office. It is not unreasonable to suppose that the print falls into the category of pro-Palmer propaganda that I refer to below and, despite the absence of other evidence, one should not dismiss too lightly the conjunction of the initials on the token with those of James Fittler (1758–1835), marine engraver to the king, even though the depiction of the mail coach on the token bears little resemblance to Fittler's engraving and is much more reminiscent of the vignettes that appeared in coach office advertisements.³¹

There is a much less obvious case to be made out for Haldimand although he cannot be completely ruled out of the argument either. Anthony ('Antoine') Francis Haldimand (1741–1817, Fig. 7) was a significant City figure.³² Born in Turin of Swiss extraction he had settled in London as an importer of Italian silks but was soon involved in a number of other large scale commercial ventures including the international loan market and banking, his firm in the next generation funding the development of Belgrave Square. He was certainly someone who would have appreciated the new mail coach service and it could well be that he was involved in a meeting of City merchants at the London Tavern in February 1792 engineered by Palmer to protest at a delay in the mails. His name, though, does not appear among the promoters of the meeting and while it is not impossible that he was 'AFH' one has to recognise that this suggestion is even more speculative than the identification of 'JF' with James Fittler.



Fig. 7. A.F. Haldimand 1772 [Painting by John Francis Rigaud]. (From [Auguste Prevost], *History of Morris, Prevost & Co.*, 1904.)

But what was the purpose of these tokens? This is not the place to spend time on Palmer's career at the Post Office.³³ It is perhaps enough to say here that, appointed Comptroller General by Pitt in 1784 to carry through his reformist ideas on the carriage of the mail, his outsider zeal and his arrogant personality cut across the entrenched attitudes of the office establishment and eventually

³¹ For Fittler, see *DNB*.

³² For Haldimand, see [Auguste Prevost], *History of Morris, Prevost & Co.* ([London], 1904), pp. 1–6; and *DNB* under 'Sir Frederick Haldimand' (his uncle) and 'William Haldimand' (his son).

³³ For Palmer, see *DNB*; Charles R. Clear, *John Palmer (of Bath), Mail Coach Pioneer* (London, 1955), *passim*. (A valuable study but suffering from a lack of references); Kenneth Ellis, *The Post Office in the Eighteenth Century* (London, 1958), *passim*; Howard Robinson, *Britain's Post Office* (London, 1953), pp. 103–9.

compromised his relations with Lord Walsingham, an equally dynamic and assertive Postmaster General who Palmer refused to recognize as his chief. It was a complex situation but Palmer's machinations to secure a role that he regarded as independent of the control of the Postmaster General eventually led to his suspension from office in 1792 and his dismissal a year later. Palmer's next twenty years were spent in attempting to obtain restitution of his office or compensation for his loss of emoluments amid a welter of pamphleteering and the other mechanics of the spin of the day. It is probably in this scenario that the *raison d'être* of the mail coach halfpennies lies; not so much as genuine provincial coinage, although the condition of many suggests that they did pass as small change, but as a means to keep Palmer's name before the travelling public, sponsored by allies at Palmer's own instigation. They have no redeeming authority and I do not accept Samuel's view that they were an expression of gratitude on the part of those coach offices or inns that benefited from Palmer's reforms. This is far too naive a judgement for no coach office or inn would have issued such a token without publicizing its own existence and location.³⁴ What is much more to the point is that the apparent dates of issue of the tokens coincide with periods when Palmer was at his most publicly energetic in pressing his claims.³⁵

My last token (Fig. 8) is again one put out by a tradesman and, as befitted someone operating in a naval dockyard town during the Revolutionary war with France, it is both patriotic and maritime in theme.



Fig. 8. Thomas Haycraft's Deptford Halfpenny [D&H: Kent 13].

The token (29 mm in diameter and averaging 9.45 g) was issued by Thomas Haycraft, a dissenting ironmonger in Deptford in 1795.³⁶ The obverse, with its recollection of a legendary scene from Kentish history, is no doubt intended to emphasize British scorn of enemy pretensions.³⁷ The reverse is much more obvious but its design is peculiar for two reasons. First, most ships depicted on tokens were shown broadside on; there are exceptions, the trow on the Thames and Severn Canal halfpenny [D&H: Gloucestershire 58–61] being the most dramatic. Here the convention is broken to show in startling clarity the stern of a 'three-decker' warship, probably taken from an architectural drawing not unlike the one illustrated in Figure 9 although the latter is from a much later history of naval architecture.

While being deliberately specific about the name of the ship represented on the token, the die-sinker (unidentified by Pye), working within the constraints of scale imposed on him, sought only

³⁴ [Samuel], as in n. 16, 23 August 1882, 202. Cf. the halfpence issued at the George and Blue Boar (D&H: Middlesex 339 and 342) and the Swan with Two Necks (W: 840 (p. 129)).

³⁵ Clear, as in n. 32.

³⁶ The token issuer is almost certainly the Thomas Haycraft whose son (also Thomas) was christened in the Butt Lane Independent Chapel, Deptford on 4 May 1778.

³⁷ The scene represents the mythical confirmation of Kentish rights by William I after the Battle of Hastings; for the story see Bell, as in n. 16, p. 68. There is no authority earlier than the thirteenth century for this story and although the Conqueror was met by Anglo-Saxon envoys bringing him oaths of allegiance at various places *en route* to London his progress through Kent was actually marked by a trail of devastation with little recognition of Kentish susceptibilities: cf. Edward Freeman, *The Norman Conquest* (Oxford, 1875), III, p. 538, n. 3.

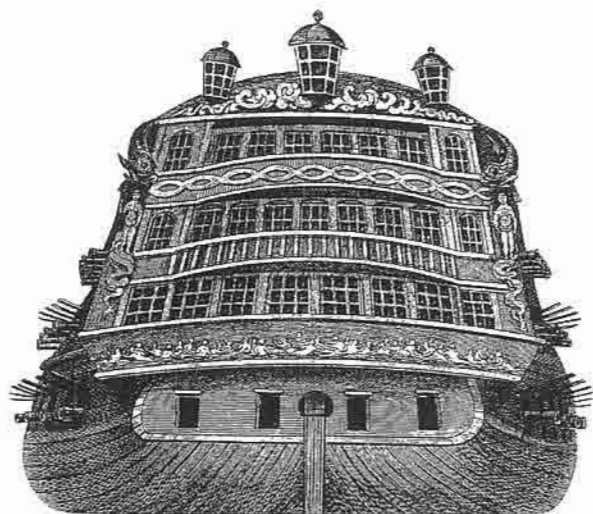


Fig. 9. Stern View of a British warship as built in 1758. (From John Fincham, *A History of Naval Architecture*, 1851.)

to convey a general interpretation of the stern of a first-rate man-of-war and it is impossible to particularise from it. The view, not unnaturally, brought to Samuel's mind the 'Royal George' that foundered so famously at Spithead in 1782. What we have here, however, is the successor to Admiral Kempenfelt's ill-fated flagship: the fourth 'Royal George' (Fig. 10) launched at Chatham in 1788 and very much in the news in 1795 as Alexander Hood's flagship in the recent action off the Ile de Groix and a participant in Howe's acclaimed, if somewhat Pyrrhic, victory of the 'Glorious First of June' the previous year.³⁸

Once more little or nothing is known about the issuer. Deptford was a major victualling depot as well as being a naval dockyard and it may be that Haycraft was a naval contractor but this conjecture should not be too readily written into the subject of the reverse. With a large resident and marine population to cater for as the only token issuer in Deptford Haycraft's coin was issued in comparatively large numbers; at least three obverses and two reverses are known and, in one version, the token was said to be redeemable in Chatham and Dover as well as in Deptford. All in all, it is probably best to accept the halfpenny as the issue of an ordinary tradesman with an eye to designs that would appeal to the patriotism of the local population both local and transient.

So much then for Mynd's tokens. Apart from Pinkerton's shilling – and even that is spoilt by a die-sinking error – they proclaim themselves to be the relatively cheap product of a small workshop. Their manufacture is by no means outstanding but neither is the engraving of their dies; the designs are imaginative but their execution leaves a lot to be desired. Pye tells us that – with the exception of Haycraft's halfpenny – Mynd's die-sinker was 'Wyon' and the only Wyon he lists in his introductory table is Thomas Wyon (1767–1830). The standard of engraving, though, must make one hesitate about too readily attributing unsigned 'Wyon' work specifically to Thomas himself or to his brother Peter (1767–1822). After all, the Wyons operated as a family concern – directed, until his death in 1796, by the father George Wyon and with two other younger brothers in the studio.³⁹ It could well be that Mynd's dies were even the work of apprentices and assistants since the Wyon studio was so heavily engaged elsewhere in the seventeen-nineties. Mynd, unlike Kempson, could not perhaps command the best that the Wyons could provide. But, again, as so

³⁸ Both victories were the subject of a number of popular tokens and medals, the most recent being Kempson's celebration (engraved by Hancock) of the Ile de Groix action (*BHM* 406).

³⁹ Thomas and Peter Wyon do not appear in the Birmingham directories until after George Wyon's death, their first occurrence being in Pye's directory of 1797. Previous to this the only Wyon in the directories was the father, George.

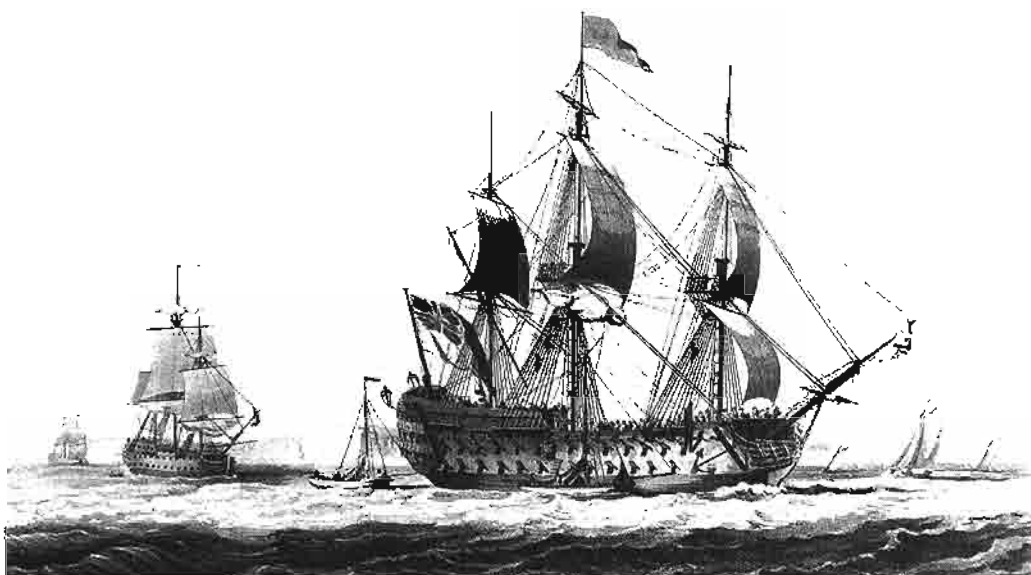


Fig. 10. HMS Royal George, 1788–1822. (From an aquatint of 1806, after a painting by Dominic Serres, in the National Maritime Museum.)

much in this paper, this is speculation and only serves to emphasise the unknowns and uncertainties attending an exploration of the 'Land of Missing Persons' in token making and the necessity of testing and re-testing much of what has been written, especially in recent times, about the tokens themselves.

THE BANK OF ENGLAND COUNTERMARKED DOLLARS, 1797–1804

H.E. MANVILLE

'To prove that some object is false, every decision in the matter presupposes the existence of an original, authentic and true, to which the fake is compared. The truly genuine problem thus does not consist of proving something false but in proving that the authentic object is authentic.'¹

IN 1797 and 1804 the extraordinary expedient of countermarking foreign coins was authorized by the Treasury. Nearly three million dollar-size coins, supplied by the Bank of England and almost entirely Spanish eight-real pieces, were stamped at the Royal Mint on Tower Hill and issued by the Bank.

The economic crisis that brought on the issue of countermarked coins had been building for many years and was triggered by a run on the gold reserves of the Bank in late February 1797. Within a ten-day period, cash payments by the Bank were suspended, an immediate resumption of the striking of silver and copper coins was urged in the House of Commons, countermarked dollars were announced at one price and then issued at another, £1 and £2 notes were authorized and issued by the Bank (the previous lowest denomination had been £5), and an issue of copper pennies and twopences was discussed.

The issues of countermarked dollars in 1797 and 1804 have been touched on by many numismatic writers. Less well-known, and generally misunderstood, was an interim, but never issued, similar marking in 1799. Also, questions raised by what appear to be genuine punch-marks on silver coins of less than dollar size have not yet been answered to everyone's satisfaction.²

The historical background leading to the issue of the Bank of England countermarked dollar tokens is well known. In 1796 Great Britain was at war with Republican France and her allies; Ireland was in turmoil; and the survival of an unsubjugated England depended upon her navy and a continuance of trade. A French fleet had attempted an invasion of Ireland in December 1796 but had not landed. A French diversionary attack on the coast of Wales in February 1797 did come ashore but the French force was captured by the local militia without firing a shot. Nevertheless, the danger of a French invasion, either of Ireland or England, remained a reality and, in fact, a small French force did land in County Mayo in August 1798 but was soon defeated.

Added to these external threats was the dependence upon local agriculture (the 1799 harvest was particularly poor) and exports to feed her population. Imported grain had to be paid for in

Acknowledgements: Graham P. Dyer, Librarian and Curator, the Royal Mint, Llantrisant, in reading through the manuscript, gave many helpful suggestions and suggested the usefulness of viewing the monetary reforms of the ten-day period in early March 1797 as a whole. He also provided the text of Appendix A from Mint records. Nicholas du Quesne Bird called my attention to the enquiry into the workings of the provincial assay offices, printed in *Report from the Select Committee on Silver and Gold Wares, together with the Proceedings of the Committee, Minutes of Evidence, Appendix, and Index* (House of Commons, 1856). I also have drawn upon the opinions of many others, published and unpublished, especially concerning the thorny questions of minor coins with genuine-type countermarks. I believe the problems have for the most part been satisfactorily solved, but acknowledge that not everyone may agree with my conclusions.

Photographs were generously provided by D. Beasley, Goldsmiths' Hall, London; E. Besly, National Museum of Wales, Cardiff; A.J. Byrne, Woodbridge, Suffolk; B. Cook, British Museum, London; R. Gladdle, London; W. Hafner, Perchtoldsdorf, Austria; S. Hill, Spink, London; and N.M.McQ. Holmes, National Museums of Scotland, Edinburgh. Illustrations not otherwise identified are or have been in the author's collections and the majority were photographed by M. Dudley, Oxford.

No one can write about the efforts by the Bank of England without relying on the late Eric Kelly's splendid study of the 1797–1816 token issues, *Spanish Dollars and Silver Tokens*. He sent me a galley proof of the text before publication and although we could not agree of the position of countermarked coins of less than dollar-size, I hope he otherwise would have been pleased with this study of the Bank's countermarked tokens.

¹ Umberto Eco, *Serendipities – Language and Lunacy*, translated William Weaver (London, Weidenfeld & Nicolson, 1999), p. 19.

² For a recent discussion of the problem, see Bob Lyall, 'One Coin, three Countries', *NCirc*, November 1994, 403; H.E. Manville, 'One Coin, Three Countries – But When?', *NCirc*, May 1995, 143–4; A.J. Byrne, 'The Countermark Controversy', *NCirc*, July 1995, 233; H.E. Manville, 'The Bank of England Countermark Controversy – Narrowing the Gap', *NCirc*, September 1995, 265; N. du Quesne Bird, 'Further to the Countermark Controversy', *NCirc*, September 1995, 265.

specie and the enormous costs of subsidies to support Continental action against the French (£23½ million between 1800 and 1801 alone) drained gold reserves. By early in 1797 the money crisis had become acute.

Invasion threats had caused extraordinary demands for cash by the Bank of England's customers – so much so that £90,000 was withdrawn on Thursday, 23 February and £130,000 the next day – leaving only £626,923 in cash and gold on hand. On Saturday, 25 February, the French invasion on the Welsh coast, although immediately suppressed, forecast even greater cash demands in the following week. On Sunday, the Privy Council met and issued an order to the Bank to cease making cash payments until Parliament could decide a further course of action. On Monday, the 27th, the crowds which gathered to exchange paper for gold were told of the Order in Council and sent away.³

Countermarked dollars, 1797

In February 1797 the Bank's silver reserves were in foreign dollars, amounting to some £241,000. The original source of most of these dollars was Spanish American mints: 'at the end of the eighteenth century sixty per cent of the world's output of silver coins came from *La Valenciana* mine in Mexico.'⁴ A second source was the purchase of Spanish dollars from Hamburg, Portugal, the West Indies and other marts, and a third was from captured Spanish coins that the Bank could purchase. The taking of Spanish prize ships could only be exploited after October 1796 when Spain, a former ally against France, declared war on England.

On Friday, 3 March 1797 a Treasury Warrant was sent to the Tower Mint instructing the officers to countermark Spanish Dollars supplied by the Bank of England with a puncheon of the king's head:

After Our Hearty Commendation. These are to authorize and direct you to prepare the necessary means of Stamping the Mark of the King's Head used at Goldsmiths Hall for distinguishing the Plate of this Kingdom on such Silver Spanish Dollars as shall be sent to your office from the Bank of England. For which this shall be your warrant.

Whitehall. Treasury Chamber the 3rd day of March 1797.

W. Pitt
J. Smyth
S. Douglas⁵

To the Warden, Master & Worker & Comptroller & the rest of the Officers of His Majesty's Mint.
Spanish Dollars to be stamped with the Kings Head.

What exactly was the 'puncheon with the king's head'? In December 1784 a duty of 6d. per ounce on silver plate had been imposed. This was immediately reflected during the obligatory hallmarking by adding a new mark with the king's head to signify that the duty had been paid. For the first two years a left-facing bust of George III within a small octagonal was applied. In 1786 this duty-mark was changed to a right-facing bust in a small oval. Five sizes of oval puncheons were employed on different sizes of plate and the largest was selected to mark the dollars.

Records at Goldsmiths' Hall, show that by 29 May 1795 Fendall Rushforth, the Deputy Touch Warden, had received from Mint engraver John Pingo over 300 punches of various types and sizes, including five sizes of duty marks with the king's head in an oval. On 30 May 1796 an additional 231 punches had been received from Pingo, and between 6 January and 10 May 1797 a further 46 punches. From 5 July 1797 the plate duty was increased and new duty marks with a nick in the oval's rim were employed. On 28 May 1798 the nicked oval punches were defaced and the following day 186 unnicked punches in four sizes were 'Receiv'd of M^r Pingo' (PI. (7)).

Marking dollars to give a fixed value was not an entirely novel idea. Although 1797 was several years before the heyday of countermarking in Scotland in the first quarter of the nineteenth century, the early 1790s had seen two English companies countermark dollars to pay their workers – the Ark Cotton Works in Lancashire and the Revolution Mill at East Retford in Nottinghamshire.

³ E.M. Kelly, *Spanish Dollars and Silver Tokens: An account of the issues of the Bank of England 1797-1816* (London, 1976), pp. 14-17.

⁴ *Ibid.*, p. 19.

⁵ *Mint* 1/14.

Quantities marked and issued, 1797

During the eighteenth century enormous quantities of Spanish dollars of eight reals were available as a commodity on the London market, the price fluctuating with availability, demand and the course of wars. These circulated freely, not only in Great Britain but throughout much of the world. Market prices in London were always quoted by the ounce and over a year tended to fluctuate in a fairly narrow band. In 1795 the low had been 4s. 11½d. in April and May, the high 5s. 4½d. from August to December, bullion prices that translate to 4s. 3¼d. to 4s. 7¾d. per dollar. In 1796 the price varied from 5s. 4½d. (4s. 3¼d.) in the first quarter of the year to March, to 5s. 2d. (4s. 5½d.) in September.⁶

As soon as the Mint received dollars from the Bank and had a supply of the oval punches they worked with astonishing rapidity, and the *London Times* on Monday, 6 March, could announce:

Bank of England, March 6, 1797.

In order to accommodate the public with a further supply of coin for small payments, a quantity of dollars, which have been supplied by the Bank, and stamped at the Mint are now ready to be issued at the Bank at the Price of Four Shillings and Sixpence per Dollar: and a further quantity is preparing.⁷

No sooner had this announcement been published than the Bank realized that although they may have obtained their dollars at a lower rate, the market value on 3 March was 5s. 5d. per ounce Troy, which translates to 4s. 7¾d. per coin, and at that rate dollars issued at 4s. 6d. would soon find the melting pot. A further notice in *The Times*, on Thursday, 9 March, announced a new valuation:

Bank of England, Monday, March 9, 1797.

In Consequence of its appearing to be the general Opinion that the Dollars will be more conveniently circulated at the Rate of 4s. 9d. per Dollar. than at that of 4s. 6d. which had been proposed. Notice is hereby given. That Dollars are now ready to be delivered accordingly at the Rate of Four Shillings and Ninepence per Dollar.⁸

Previous writers have disagreed on the market price of dollars in 1797. Pridmore cites the private correspondence column in *The Times*, Monday, 6 March 1797 – ‘these dollars, although intrinsically worth 4s. 2d. are to pass for 4s. 6d.’ – and he may be forgiven for assuming that a contemporary statement would be correct.⁹

Writing in 1900, Maberly Phillips was more accurate: before the Bank had issued the marked dollars at 4s. 6d., ‘it was discovered that the bullion value of the dollar was 4s. 8d., so that, had they been issued [at 4s. 6d.], they would at once have been melted down at a profit of 2d. per coin.’¹⁰

Although familiar with the Phillips book, W.J. Davis, writing four years later, further confused the situation, assigning the Bank’s countermarking to the firm of Boulton and Watt instead of the Royal Mint: ‘previous to the issue of the Bank dollar of 1804, Boulton and Watt at their Soho Mint had countermarked 3,744,585 Spanish dollars ... The forgery of the countermarks, and of the dollars, had become such a scandal, that as many genuine pieces as could be collected were sent to the Soho Mint, to be restruck by the new machinery invented and used there.’¹¹

Davis did get the dollar weight approximately right although, surprisingly, apparently misunderstood the token nature of the marked dollars: ‘the countermarked dollars were issued in 1797 at 4s. 9d. each, and, as they weighed only 63 grains under the ounce [i.e. 417 grains], it will be seen how, without a firm, clear, and definite policy on the part of the Government, the coinage would be demoralized.’¹²

⁶ *An Account Of the Market Prices of ... Spanish Dollars, or Pillar Pieces of Eight ... from the 3d of January 1746, to the 1st of March 1811 inclusive. Extracted from Castaing's and Lloyd's Lists. First Quotation every Month ... Ordered, by the House of Commons, to be printed, 4 March 1811.*

⁷ Reprinted in F. Pridmore, ‘The Bank of England Oval and Octagonal Countermarked Token Dollars of 1797–1804’, *NCirc.* June 1955, col. 263.

⁸ *Ibid.* This announcement was somewhat disingenuous: four-and-nine was not a more convenient sum than four-and-six and the sole reason appears to have been the current market price of the dollars.

⁹ *Ibid.*

¹⁰ M. Phillips, *The Token Money of the Bank of England 1797 to 1816* (London, 1900), p. 9.

¹¹ W.J. Davis, *The Nineteenth Century Token Coinage* (London, 1904), p. xxii.

¹² *Ibid.*, p. xxvii.

A generation later, in 1931, Charles Oman appears to have mistaken the procedures for issuing and redemption, as well as the value of the dollars: 'the public were invited to bring dollars to the Bank of England, and to get 4s. 9d. apiece for them – twenty dollars to be the least sum tendered at one time. Now the Spanish dollar weighed 423 grains, and was a little less pure than the English silver crown of 463 grains [*recte* 464.5, to nearest quarter-grain]; so 4s. 9d. was an over-valuation – on the English standard a Spanish dollar would have been worth only the absurdly tiresome sum of 4s. 4 $\frac{3}{4}$ d.'¹³

The market price of Spanish dollars, as quoted in the Sessional Papers of the House of Commons, had been 5s. 3d. per ounce on 2 December 1796; no price was noted on 3 January 1797; and then 5s. 2 $\frac{1}{2}$ d. on 3 February; 5s. 5d. on 3 March; 5s. 5 $\frac{1}{2}$ d. on 4 April and 2 May; 5s. 3d. on 2 June; 5s. on 4 July; 5s. 1d. on 1 August; 5s. on 1 September; and was not quoted in October through December 1797.

The market price of individual dollars, averaging about 416 gr, was 4s. 5 $\frac{3}{4}$ d. in early February 1797 but had risen to 4s. 7 $\frac{3}{4}$ d. by 3 March, the very day that the Treasury issued the warrant to the Mint authorizing the countermarking of the dollars. Because the bullion price of dollars fluctuated, as with any other commodity, the Bank obviously would have been shaving it very closely to issue dollars at 4s. 6d. when the market price was 4s. 5 $\frac{3}{4}$ d., and when the price rose by a penny three-farthings above 4s. 6d. in early March they were forced to re-value the marked dollars upwards to avoid instant melting by the public.¹⁴

From June 1797, when the price of dollars on the London bullion market fell to 4s. 6d., the application of a false punch on a genuine dollar would have yielded a profit of about a 5%, and during the summer a further drop in the market price would have increased the profit to between 8% and 9.5%. The many false countermarks on genuine coins known today testify that extensive counterfeiting went merrily on for months (Pl. 9, 1–2). Although the quality of many of the false marks is rather poor, some are quite good, and with such a small stamp it is no wonder that the Bank clerks, to say nothing of the general public, had difficulty trying to separate the wheat from the chaff.

Kelly records that, to everyone's surprise, the Bank's representative at the Mint reported that forged dollars had been found among the coins sent over in mid-July. They had been countermarked and he was sure that some had passed into circulation.¹⁵ This report raises several questions. If the Mint detected counterfeit dollars on receipt, why did they stamp them? If the frauds were discovered only after the dollars had been punched, why did they not separate them and inform the Bank? When, in the autumn of 1797, the Mint petitioned the Treasury for payment, they specified an end date for their countermarking of 31 May. Add to this problem the many false marks on counterfeit dollars, and it is no wonder that the Bank felt forced to recall their tokens after little more than half a year (Pl. 9, 3–6).

The first recall notice, dated 28 September 1797 and printed in the *London Gazette*, announced that dollars would be redeemed until 31 October. At first, only coins with official marks were to be accepted. The difficulty, however, in deciding which oval marks were genuine and which were not was so acute (one can easily imagine the outrage and heated arguments that could develop when coins were rejected) that the Bank capitulated.¹⁶

A notice in *The Times*, dated 10 October, announced that all genuine dollars would be accepted at 4s. 9d., whether the mark was official or not, from 'all persons who appear to have taken them in the fair way of currency or business. This indulgence will be continued until Saturday, the 21st inst., unless it should become necessary to withdraw it by the attempts of evil-minded and dishonest persons to impose on the bank.'¹⁷ In the event, only some £1,076 17s. 6d. worth of genuine dollars with false marks was redeemed.¹⁸

¹³ C.C. Oman, *The Coinage of England* (Oxford, 1931), p. 361.

¹⁴ *op. cit.*, House of Commons, 4 March 1811.

¹⁵ Kelly, *Spanish Dollars*, as in n. 2, p. 29.

¹⁶ Pridmore, 'Token Dollars', as in n. 6, col. 263.

¹⁷ Pridmore, 'Token Dollars', as in n. 6, cols 263–4.

¹⁸ Kelly, *Spanish Dollars*, as in n. 2, p. 33. On p. 28 Kelly cites a case when in July 1797 one man produced 122 dollars, all with counterfeit stamps, claiming that he had received them in the normal course of business. An investigation showed that he had a very shady history and the Bank, probably illegally, refused to return his coins until they could bring an action at law.

On 23 November 1797 the Mint Office informed the Lords Commissioners of the Treasury that between 5 March and 31 May in that year they had received from the Bank of England 2,323,295 Spanish dollars, weighing 167,916 pounds troy, 'which were stamped and returned to the Bank of England, in equal weight'. The Mint suggested that 'for defraying the charge and expense attending the stamping, forging [the steel] and engraving punches and compensating the officers of the Mint for extraordinary attendance in giving the required dispatch to the business, in the receiving, weighing, delivering, and keeping accounts of the said dollars, and in regard to the charge and risk attending this service; there be allowed one penny upon the pound weight (on which the Master of the Mint declines any claim to himself) and on the above mentioned weight of 167,916 Pounds will amount to £699-13-3.' Payment of this sum was approved by the Treasury over a year later on 4 February 1799.¹⁹

The Mint figure of 2,323,295 dollars weighing 167,916 pounds troy, delivered March–May 1797, yields an average of slightly more than 416 grains per coin (416.30363 gr). This figure is about two grains higher than the average of randomly-chosen countermarked Spanish dollars weighed recently, but some of the heavier dollars may have been culled for melting over the years and it is possible that other coins may have lost a grain or two through normal handling wear during the past two centuries.

The Mint account of the numbers of Spanish dollars stamped and their weight does not quite agree with the Bank's figures, as given the following year. In reply to questions of the Lords of the Committee of the Privy Council to the Governor and Company of the Bank of England, relative to the countermarked Spanish Dollars, about March 1798, the Bank reported that '1,934,033 ounces [161,169 pounds 5 ounces] of dollars were stamped at the Mint consisting of 2,232,788 pieces amounting at 4s. 9d. each to £530,287 3s. 0d.' By this account, the average weight of a dollar was 415.78 gr.²⁰

Marked fractional coins

A number of numismatic writers have remarked on the existence of marked fractional coins, primarily those with an oval stamp, but also a few with an octagonal.

Maberly Phillips ignored the fractional pieces, but W.J. Davis uncritically listed everything he had seen or heard of, including half-dollars and quarter-dollars with oval or octagonal stamp and an eighth-dollar with oval, though he missed the sixteenth-dollar with oval, which may not have existed in 1904 (Pl. 8, 4). He also cites an 'octagonal countermark on a Spanish Dollar; but in addition, counterstruck over the large bust with the small oval head (Pl. 10, 7). This singular piece is probably unique, and was sold in the Marshall sale at Sotheby's lot 568, March 1852', and a copper halfpenny token with oval, 'from the genuine die of the Goldsmiths' Company and perfectly struck' (Pl. 10, 6).²¹

Charles Oman merely noted that, 'a few half-dollars are found with this over-stamp, though this was not licensed in 1797.'²² Brooke uncritically listed, 'countermarked Spanish Dollar (current at 4s.9d), half, quarter, and eighth. With oval countermark, 1797, octagonal, 1804',²³ while H.A. Seaby at first accepted all sizes (except the half-real) as worthy of listing in *The English Silver Coinage from 1649*. The first edition (1949) includes ovals and octagonals on four and two reals as half-dollars and fourteen pence (nos. 611–612, 980–981), and the oval on one real as possibly seven pence (no. 1482). In the second edition (1957) the four reals was retained but the two reals and one real were dropped. By the fourth edition (1974) the octagonal mark on the four reals also had disappeared, and a warning note was included after the dollars: 'collectors should be most wary of paying high prices for unusual countermarked coins: many very dangerous forgeries exist,

¹⁹ *Mint* 1/15.

²⁰ *Mint* 1/15.

²¹ Davis, *Token Coinage*, as in n. 10, pp. 12–13. An oval mark over an octagonal can only have been false – and the octagon probably also was false.

²² Oman, *Coins of England*, as in n. 12, p. 361.

also a number of countermarks from genuine dies [i.e. punches] on coins which are believed never to have circulated as countermarked pieces.' The fifth edition, edited by P.A. Rayner (1992), repeats the warning and also notes: 'a small number of non portrait "pillar" dollars countermarked with an oval stamp exist. These appear to be genuine countermarks and have been stamped in error' (Pl. 10, 2).

Pridmore attacked the legitimacy of all countermarked non-Spanish dollars ('already a fairly large group, and is constantly growing'), dividing them into four classes:

- I. Sub-divisions of the Spanish dollar.
- II. Miscellaneous silver coins below the crown or dollar denomination.
- III. English copper coins and eighteenth century copper tokens.
- IV. Miscellaneous silver dollar or crown size coins.

'The majority of coins recorded under classes I to IV occur stamped with the oval punch. During a period extending to over 15 years, I have carefully examined every countermark of this series that has come to my notice. In a total of 307 coins bearing the oval punch, I have observed nine distinct forms of the king's head, and out of these nine, only two are of the appearance that could be classed as the product of skilled craftsmen. The remaining seven are poor reproductions and at once reveal their unauthorized origin ... Ordinarily, the stamped coins recorded under class I to III would present no difficulty in determining their origin, they were not stamped or issued for circulation as tokens. This fact is quite clear from the records. They cannot, however, be dismissed from the series for all the coins except one, that I have been able personally to examine of classes I to III, that bore the oval countermark, the type of punch used ... is the official type of mark used upon the dollars.

'The question naturally follows. What are they? and for what purpose were they stamped? ... Suggestions made at various times for their occurrence are:

- (a) They are genuine tokens.
- (b) Patterns.
- (c) Curiosities by mint workmen.
- (d) Forgeries.

'My comments to these suggestions are:

- (a) *Genuine tokens*. Not feasible. To have been genuine tokens some announcement of their circulating value would have been necessary. The record of the 1797 issue is complete, and all sources ... are in agreement on one fact. Only DOLLARS were stamped for circulation. With a 20 dollar minimum redemption limit, the Bank of England certainly never fiddled about with subdivisions as low as $\frac{1}{16}$ th of a dollar.
- (b) *Patterns* ... When examined more closely this suggestion is no better than that given at (a). Based upon a Dollar of 8 Reals at 4/9 per dollar, the sterling equivalent of the sub-divisions at par with the dollar is:

Half dollar or 4 Reals	$2/4\frac{1}{2}d$
Quarter dollar or 2 Reals	$1/2\frac{1}{3}d$
Eighth dollar or 1 Real	$7\frac{1}{8}d$
Sixteenth dollar or $\frac{1}{2}$ Real	$3\frac{9}{16}d$ ²⁴
- (c) *Curiosities*. Possibly some such specimens were done by Mint workmen, but I do not favour the idea to any great extent. It would explain why such coins appear to have the official mark, but a normal curiosity of this type would be any chance coin, not in complete sets of one coin type.

²³ G.C. Brooke. *English Coins* (London, 1932), p. 229.

²⁴ Numismatists today no longer advance the pattern theory and it is unnecessary to repeat Pridmore's lengthy discussion and reasons for rejection.

- (d) *Forgeries*. This too is impossible in the strict sense of the word. There was no original token stamped for circulation lower than the dollar and as one cannot forge something that never existed, the dollar divisions cannot be classed as forgeries.²⁵

'CLASS II AND III ... It is impossible for these [non-Spanish small silver coins and coppers] to have been stamped officially for circulation as tokens. There is only one term that can be applied to the entire series of coins classes I to III and that is CONCOCTIONS. Many, from the pedigrees they possess, appear to have been stamped during the early years of the 19th century, and were no doubt the fabrication of early dealers ... to satisfy the demand for unusual and rare items. Others are the result of two very active persons between 1860 and 1920, who created some very curious mutilated coins for the collector ...

'CLASS IV. A constantly growing series of non-Spanish dollar size coins occur with both oval and octagonal marks.

'Dealing first with the oval stamped pieces. It is possible for an occasional "stray" to have been included in a batch of dollars sent by the Bank to the Mint for stamping. Owing to the fact that the official type of mark is to be found on the impossible coins of classes I to III, there exist no means of proving the origin of these other curious pieces of class IV that bear the oval stamp ... (Pl. 10, 3–5).

'The octagonal mark on any of the classes from I to IV should offer no difficulty. The stamp is larger and more difficult to copy. A careful comparison of any octagonal stamped piece with a silver penny of the second or third type of George III [i.e. 1792, 1795, 1800] should at once reveal the fact of whether it is a forgery or not ...' (Pl. 11, 1–4).

Pridmore concludes: 'The Government agreed to Spanish dollars, the Bank announced Spanish dollars, usually referred to as Dollars, and not Scudos of Venice, Pisa or French Ecus. The Bank of England dealt in Spanish Dollars as merchandise, and customers who demanded that coin, expected to receive that coin.'²⁶ This rather dogmatic statement does not take into account that a heavy silver coin was a heavy silver coin and the occasional non-Spanish dollar could easily be accepted by a population accustomed to accepting a very mixed bag of foreign and domestic gold and silver coins by weight (Pl. 11, 5).

Kelly argued that fractions in Bank accounts indicated that small coins must have been marked: Bank figures show that 'dollars going into the Current Cash Account for twenty eight out of the sixty entries shew half-dollars and one gives quarter-dollars. As these were the totals for the day there were probably many more to make up a round figure in dollars. The Bank added half and quarter dollars to make up a bag to the standard weight of 1000 ounces troy. Segments were also used and there was the occasional coin other than Spanish thrown in, all of which were complained of at a later date by the military authorities, who preferred some uniformity. Having no precedents for counter-marking, the reaction of the Mint would have been to strike whatever came into their hands and the question of refusing to strike fractional coins was never raised. The doubts that are cast on the validity of these coins by numismatists would seem to have no foundation.'²⁷

Kelly was unable to find a specific statement in the Bank archives that marked fractions were received from the Mint and his claim that the Mint would have marked everything that came into their hands is questionable. What of Kelly's 'segments' and non-Spanish coins – to say nothing of hack-silver – supposedly used to make up 1000 ounce bags? Bags supplied by the Bank and returned by the Mint in 1797 and 1799 did not always weigh exactly 1,000 ounces (see Appendix A).

Did the Mint uncritically stamp *everything* that came into their hands? Or did they merely stamp the dollars, as they were directed and any small pieces of silver were dumped back on top to make up the weight? Kelly illustrates two four real coins cut in half *after* the oval had been

²⁵ Pridmore suggests that persons illegally stamping dollars outside the Mint may have marked an occasional half-dollar and that a master punch perhaps 'passed into private hands outside of the Mint ... and fell into the hands of interested parties who produced stamping punches to all and sundry who cared to pay the price'.

²⁶ Pridmore, *NCirc*, July–August 1955, cols 307–11.

²⁷ Kelly, *Spanish Dollars*, as in n. 2, p. 24.

applied to whole coins. Was the cutting done at the Mint or at the Bank? Whether or not fractional coins were marked at the Mint, the fact remains that such pieces were unauthorized, were never issued and, even if stamped, are unlikely ever to have left the Bank. Except for a few possibly put aside as mementos (e.g. Kelly's cut half-dollars), they would have been melted along with the redeemed dollars by the end of June 1799.

The Mint report of 23 November 1797 states the exact number of dollars stamped (2,323,295) and gives their weight in pounds (167,916) – without extra ounces. The Mint kept very accurate records of the weights of the coins received and returned to the Bank, but for the purpose of billing the Treasury at a penny per pound the gross weight was rounded off.

If the Mint received, and counted, the dollars to be stamped, weighing them for billing purposes before each shipment back to the Bank, there would have been no need to send fractional coins or pieces of hack-silver to the Mint. When the stamped dollars were received back at the Bank, small pieces of silver could have been added in order to make up 1,000-ounce (or whatever) bags to store in their vaults until needed.

Nevertheless, genuine-type oval countermarks do exist on fractional silver coins and some collectors maintain that they must have been sent over by the Bank and marked at the Mint along with the dollars. Genuine-type marks also are known on copper coins and tokens which could not have been included in bags of silver sent out by the Bank. Patently false countermarks and worn marks which are unlike those on the dollars also are known on fractional coins, and these easily could have been applied outside the Mint to meet collector demand at any time during the past two centuries (Pl. 10, 1).

For an explanation for some, if not all, of the genuine-type marks found on coppers and fractional silver coins, we may look to the many assay offices around the country. The oval duty-mark, introduced in 1786, came in five different sizes, depending upon the article to be marked, and the largest size, intended for large pieces of silverware such as trays or elaborate table pieces, was the one used by the Mint for countermarking (Pl. 7). The punches for this mark were available at all the assay offices, except Dublin, for many years:

London – 1786–1821

Birmingham – 1786–1797, 1809–1830

Chester – 1786–1796

Edinburgh – 1786–1796

Exeter – 1786–1796, 1799–1821

Glasgow – 1819 only (from 1784 to 1819 all Glasgow silver was marked at Edinburgh)

Newcastle – 1786–1802

Sheffield – 1786–1797, 1805, 1814–1823

York – 1786–1795.²⁸

With such widespread availability of the same punches used to countermark dollars, it would indeed be surprising if workmen at some of the assay offices did not use the punch on unusual coins or tokens which immediately or eventually found their way into numismatic collections. This also could account for marks other than in the centre on Spanish dollars and on some of the non-Spanish-American dollar-size coins. There also remains the unlikely possibility that some of the assay offices assumed that they had authority to stamp and issue dollars, and possibly even smaller coins – or to provide this service for provincial banks.

Although prepared fifty years later, an enquiry into the workings of the provincial assay offices turned up numerous cases of abuses. The Exeter assay master kept a public house and the inspectors concluded that he was incapable of performing an accurate assay with the apparatus he had.²⁹ The assay-master at York was an innkeeper where he kept the duty and other punches although not any assaying equipment and the inspectors reported that nothing had been assayed at York 'for many years.'³⁰ Although the assay offices at Glasgow and Edinburgh were well-run, 'the assay

²⁸ *Bradbury's Book of Hallmarks*, new edition, revised (Sheffield, 1993). Other hallmark lists sometimes give slightly different years when this oval mark was in use, but Bradbury's is the most complete and appears to be the most reliable.

²⁹ *Report from the Select Committee on Silver and Gold Wares, together with the Proceedings of the Committee, Minutes of Evidence, Appendix, and Index*. Ordered, by the House of Commons, to be Printed, 1 May 1856; p. 2, Q. 13–16.

³⁰ *Ibid.*; p. 10, Question 125–35.

master at Glasgow stated that there was reason to believe that a considerable quantity of plate was manufactured at Aberdeen and in the north of Scotland that was not brought to the assay offices, and for which no duty was paid. Q. And upon which, therefore, there is no assay mark? A. They impress an imitation mark, as I have understood from a communication which I have received ...³¹

Here is a direct reference to false duty-punches and there is little reason to assume that the provincial offices had been any more security-conscious during the Bank's countermarking era. It does not take a great leap of imagination to picture assay offices of an earlier age punching up almost any type of coin or token (Pl. 8, 1–3). That the purpose of applying most genuine-type marks outside of the Mint was deliberately to create varieties is strongly suggested by the lack of coins or tokens stamped with the six smaller versions of the oval duty-marks.

Another source of false oval punches has been attributed to an increase in duty taxes. By 1815 the duty of 6d. per ounce, which had been imposed in 1784, had risen to 1s. 6d. per ounce. 'Even by standards of today, this would be considered extremely severe, so it is not difficult to imagine that much counterfeiting of the duty mark should occur. So much, in fact, that in 1815 it was made a capital offence.'³²

Countermarked half-dollars, 1799

On 21 September 1799, the Treasury issued a warrant instructing the Officers of the Royal Mint to countermark Spanish Dollars with the Mark of the King's Head:

After Our hearty Commendations. These are to authorize and direct you to prepare the necessary means for Stamping the Mark of the Kings Head used at Goldsmiths Hall for distinguishing the Plate of this Kingdom on such Silver Spanish Dollars as shall be sent to your office from the Bank of England, for which this shall be your warrant. Whitehall. Treasury Chambers the 21st Day of September 1799—

W. Pitt.
S. Douglas.
Charles Small Pybus.

To the Warden, Master and Worker &
Company and the rest of the
Officers of His Majesty's Mint.
Spanish Dollars to be stamped with the King's Head.³³

Subsequently on 6 November 1799 the Mint sent a request to the Treasury for payment for countermarking Spanish Dollars in September of that year:

To the Right Honorable the Lords Commissioners
of His Majestys Treasury.
May it please your Lordships.

In obedience to your Lordship's warrant dated 21st Sept^r. last directing us to receive Silver Spanish Dollars from the Bank of England to be marked with the stamp therein directed.

We beg to acquaint your Lordships that in pursuance thereof we received 945,460 Dollars weighing 34,166 pounds weight which were stamp^t accordingly and returned to the Bank in equal weight.

That for defraying the expense incurred in the execution of this Service and in consideration of the Risque to which it was necessarily exposed together with some compensation to the Officers for extraordinary attendance it is humbly proposed that your Lordships may be pleased to grant an allowance of one penny in the pound weight, being the same as your Lordships were pleased to allow in a similar Service in the year 1797, which at that rate will amount to One Hundred forty two pounds seven shillings and twopence, and that your Lordships may be pleased to authorize Lord Hawkesbury to pay the said Sum of £142-7-2 out of monies received by him for the Service of this Office to be divided in such proportions among the parties intituled thereto as the Principal Officers may think just and proper, and that the Auditor be directed to allow the same, in the Master's Account under proper voucher.

All which is nevertheless humbly submitted to your Lordships Wisdom.

³¹ Ibid.; p. 21, Question 303–4.

³² John Bly, *Discovering Hall Marks on English Silver*, 7th edn 1986 (reprinted Haverfordwest, 1993), p. 12.

³³ *Mint 1/15* (slightly corrected from the original warrant). The address to the Warden, Master and Worker & Company, although appearing on the original warrant, is incorrect and should read Comptroller.

Mint Office
6th Nov. 1799.

We are
May it please your Lordships &c. &c.
Ed Lucas Depty Wardn
James Morrison Depty Mastr
John Wyeat Depty Comptr

Payment of this amount was approved on 17 April 1800.³⁴

Although only dollars were sanctioned in the Treasury warrant, and dollars were stated in the request for payment, 945,460 coins weighing 34,166 pounds Troy averages about 208.15 grains – half of the weight established for dollars of eight reals – and it is therefore obvious that the entire 1799 marking was on half-dollars of four reals. It also suggests that the Bank no longer kept a stock of the 1797 countermarked dollars which could be re-issued and, in fact, by 30 June 1799 the Bank had converted to bullion its entire holdings of 2,194,091½ countermarked dollars, weighing 1,895,696 ounces and valued at £521,100. Whatever the reason, the newly-countermarked half-dollars were never officially issued in Great Britain.³⁵

The great majority of dollars with genuine-type countermarks from the 1797 issue are on host coins from Spanish-American mints, principally Mexico City. Host dollars from Spanish mainland mints are decidedly rare. In contrast, the majority of the half-dollars supplied by the Bank evidently were from the Madrid mint and a few from Seville because these are the coins with genuine-type oval countermarks commonly encountered today. Apparently the Bank had obtained 410 sacks of four real coins, weighing very close to 1,000 ounces each, that had come directly from Spain, or through a middleman supplier. Oval marks on half-dollars other than from Madrid and Seville should be viewed with suspicion: false oval marks are known on Spanish-American half-dollars and even those with genuine-type marks tend to be on unusual host coins that might appeal to collectors (PL 10, 1).

The problem of why four real coins were officially struck remains a mystery. After 22 June 1799 'a treaty between England and Russia was signed concerning the recovery of Holland from the French. The general terms of this treaty was, that England engaged herself to provide 30,000 troops and to pay for 18,000 Russian. The British expedition sailed on 14 August, successfully landed in Holland w[h]ere it was later joined by the Russian troops. However [there was a] cessation of hostilities and terms with the enemy early in October. By the 30th November, the allied forces had been withdrawn from Holland, the Russian troops being quartered in the Channel Islands. It is fairly certain that the cause for the contemplated reissue of the stamped dollars in 1799 was this expedition to Holland, but whether the measure was intended to provide specie for Military Treasure Chests or to alleviate a sudden shortage of coin in England is not yet certain ...'³⁶

Kelly was surprised that 'the Bank started again in September to countermark dollars, two months after the 1797 issues had been converted to bullion. Between the 21st September 1799, when a warrant was issued, and the 6th November, when payment was requested, dollars weighing 409,992 ounces were sent and returned stamped with an oval countermark. Neither the [Bank's] Court nor the Committee of Treasury discussed either a reason or a price to be set on the dollars. No record of a movement of the Bank's silver can be traced nor were the dollars transferred to the account of current cash as they would had they been intended to be issued to the public. If the dollars belonged to the Bank then they could have been stamped to be held in reserve for some contingency ...

'They were never issued to the public by the Bank, yet countermarking was necessary only for a civilian population used to a constant unit of currency; the thousands of dollars supplied to the army and navy were never countermarked. It seems likely, therefore, that in the chaotic state of the exchange rates at the end of 1799 it was considered inexpedient to issue them and they were eventually melted down when the dollars were in short supply in 1811 ...

³⁴ *Mint 1/15*.

³⁵ Kelly, *Spanish Dollars*, as in n. 2, p. 34.

³⁶ Pridmore, *NCirc*, June 1955, col. 259.

'The Duke of York, repeating the failures of his disastrous campaign of 1794, had led a combined army to the Helder Peninsular [*sic*] in the Netherlands in August where he was defeated ... After their withdrawal on the 17th October, Britain's new allies, the Russians, were taken to the Channel Islands where they had to be maintained and to do this the Bank sold on behalf of the Treasury £100,000 in bar silver "for the use of Russian Troops on this Continent".

'The monetary situation in the Channel Islands was a complicated one: French coins were usually used but the recent changes in the currency made them difficult to acquire. English money, though not of legal tender, had been introduced by the troops and with it were countermarked dollars. These had a legal position in Guernsey by the *Ordonnance de la Cour Royal* of the 28th March 1797 which, translated, said that "As the Court is informed that the Bank of England has put into circulation a large quantity of *Pisatres d'Espagne* (in English – Spanish dollars) and that the price is fixed a 4 shillings and 9 pence sterling for each dollar, it is ordered that these dollars shall be current in this island at this value of 4s9d for each piastre ...". No similar *Ordonnance* has been noted concerning half-dollars.³⁷

Countermarked dollars, 1804

The need for silver coins, always a problem as long as the Government would not allow either an increase in the official coinage of 5s. 2d. per ounce or the striking of silver coins at a rate of 65 or 66 shillings to the pound instead of 62 (which price and weight had been in effect since 1601), again became acute in 1803. In May of that year, Napoleon had shattered the fragile Treaty of Amiens, signed in March 1802, and the renewal of war brought on the usual rising prices and hoarding of what silver coin remained in circulation. Banks were paying £101 to obtain £60 worth of silver coins.³⁸

In December, a deputation of city bankers urged the Directors of the Bank of England to provide some relief to the shortage of silver coins. Their petition was reflected in a press report on Christmas Day:

'It is to be regretted that the Bank does not issue some portion of the dollars it is stated to possess, in order to relieve the inconvenience now so generally experienced from the want of silver coinage; they might, as formerly, be issued at a price above their intrinsic value, by which means they would remain in circulation, but should even a loss attend their delivery, a circumstance in no way probable, the public have a right to a slight participation in the enormous profits which result to the Bank from the restriction of its payments.'³⁹

The Government acted with commendable alacrity to the request and on 2 January 1804, the Treasury issued a warrant instructing the officers of the Mint again to countermark Spanish dollars:

'After our hearty Commendations: These are to authorize and direct you to prepare the necessary means of stamping in an octagon form, the head now used for impressing the Silver penny, omitting the Inscription, on such silver Spanish Dollars, as shall be sent to your Office from the Bank of England; for which this shall be your warrant.

Whitehall, Treasury Chamber, the 2nd day of January, 1804.

Henry Addington
William Brodrick
Nat Bond.

To the Warden, Master & Worker
and Comptroller, and the rest
of the Officers of His Majestys Mint.'⁴⁰

Although the supply of available Spanish dollars was no longer as plentiful as it had been in 1797, both the Bank in delivering dollars and the Mint in stamping them acted quickly and within ten days the press could report that the newly countermarked dollars were available:

³⁷ Kelly, *Spanish Dollars*, as in n. 2, pp. 42–43.

³⁸ Kelly, *Spanish Dollars*, as in n. 2, 49.

³⁹ *The Observer*, Sunday, 25 December 1803; extracted by Pridmore, *NCirc*, June 1955, col. 265.

⁴⁰ *Mint* 1/15.

'DOLLARS - The Directors of the Bank have intimated to the Bankers and Merchants, that they may be accommodated with any quantity of Dollars (stamped with the Kings head) at 5s. each, and that they will be received again in payment by them, for a time, at that rate. Due notice will be given of the period of their circulation ... They have rated them at 5s. which is full threepence halfpenny above their real value according to the price of bullion, that they may not be melted down, and the only danger of loss that the Bank can run is, that this profit of $3\frac{1}{2}d.$ may tempt the vigilant active race of manufacturers who overlook no occasion of benefit, to affix a stamp to Dollars not issued by the Bank - so that they may have to redeem more than they give out. They will of course guard against counterfeits.

Every Banking-house in town yesterday morning received £1,000 worth of dollars from the Bank in exchange for Bank paper ...⁴¹

By 9 February more than 400,000 countermarked dollars had been returned from the Mint and transferred to the Bank's Current Cash Account: 'by the 21st February the number of dollars in the Bank was reduced to 39,000 although there was a balance of unissued stamped dollars amounting to 284,000 out of the total of 412,140 returned from the Mint.' According to Mint figures, the total number of countermarked dollars amounted to 415,080 (see Appendix A). Eventually, 266,000 octagonally-stamped dollars were issued to the public.⁴²

The press prediction that the new stamp would soon be counterfeited was accurate and a majority of the dollars with octagonal countermark seen today have been stamped with a false punch. The large head adapted from the Maundy penny design of 1792, 1795 and 1800 was difficult to copy accurately and evidently the Bank's clerks were able to recognize and reject the counterfeits for redemption at issue price - thrusting them back onto the public from where many of the survivors have found their way into numismatic circles (Pl. 12, 1-5).

Nevertheless, the situation remained acute, as reported in *The Sun*, Wednesday, 18 April 1804:

Many Dollars are in circulation with a forged stamp, by which the Public is likely to be defrauded of nearly threepence in each Dollar, as the Bank will not pay or take in those with counterfeit stamps. The Directors are so well satisfied of the extent of this mischief that they do not now issue any more of the stamped Dollars, but have contracted with Mr. Bolton [*sic*], of Soho, to strike a large quantity with a beautiful impression of the King's head, which we understand cannot be counterfeited without great difficulty; they will be issued in short time.

Boulton had prepared dollar patterns as early as 1798, and by May 1804 the Bank had accepted his offer, an announcement appearing in the *London Gazette*, Saturday, 12 May 1804:

Bank of England, May 12, 1804.

The Court of Directors of the Governor and Company of the Bank [of] England, with the Approbation of His Majesty's Most Honorable Privy Council, having caused Dollars to be stamped at Mr. Boulton's Manufactory, with His Majesty's Head and an Inscription 'Georgius III, Dei Gratia Rex' on the Obverse, and Britannia, with the words 'Five Shillings Dollar Bank of England, 1804' on the Reverse, which they propose to issue instead of the Dollars which have been lately stamped at His Majesty's Mint at the Tower, the latter of which it is expedient to withdraw from Circulation, hereby give Notice, that those Dollars which have been stamped at the Tower since the 1st Day of January last, and which are now in Circulation, will not be current, nor be received at the Bank at the Rate of 5s. each, after the 2nd Day of June next; and that after the 20th Instant until the said 2nd Day of June inclusive, they may be exchanged for Dollars with the new Stamp, or for Bank Notes, after the Rate of 5s. for each Dollar. Attendance will be given at the Bank for this Purpose on Monday the 21st Instant, and the following Days (Sunday and Fast Day excepted), until Saturday the 2nd Day of June inclusive. But to avoid Confusion from a Crowd of Persons applying at the same Time, the Court finds it necessary to give Notice, that smaller sums than Eight Dollars cannot be exchanged at the Bank.

Robert Bell, *Secretary*.⁴³

With Boulton's over stamped dollars in production, it was expedient rapidly to withdraw the Bank's newly-marked dollars, and the circulating period of the octagonals was even shorter than that of the ovals in 1797: 11 January to 2 June 1804.⁴⁴ Thus the experiment of circulating Spanish

⁴¹ *The Morning Herald*, Friday, 13 January, 1804; extracted by Pridmore, *NCirc*, June 1955, col. 266. The press statement that the difference between the market and issuing prices came to $3\frac{1}{2}d.$, or 4s. $8\frac{1}{2}d.$ per coin, agrees very closely with market reports. On 3 January the published price of dollars per ounce was 5s. $6d.$, which works out to 4s. $8\frac{1}{2}d.$ per coin. The five-shillings issue price also gave a cushion against slight fluctuation in the bullion market and, in fact, from February to May the price per dollar stood at 4s. $9\frac{1}{2}d.$

⁴² Kelly, *Spanish Dollars*, as in n. 2, pp. 50-1.

⁴³ Pridmore, *NCirc*, June 1955, col. 266.

⁴⁴ Spanish dollars overstruck by Boulton & Watt evidently averaged somewhat lower weight than those stamped at the Mint. A brass coin-weight to match against the overstruck dollars is marked 17p $6\frac{1}{2}g$ (17 dwt $6\frac{1}{2}g$ grains, i.e. 414.5 grains (Pl. 11, 6).

dollars in 1797 and 1804 (with, perhaps, the intention of an issue in 1799) came to a rather ignominious end, superseded by technology then unavailable in London. The firm of Boulton & Watt overstacked dollars from 1804 to 1811 (all dated 1804, however), but the use of countermarks on dollars did not die. We have seen that a few manufacturing firms had countermarked dollars before 1797, and until the mid to late 1820s scores of private tradesmen and banks, particularly in Scotland, continued the practice.

APPENDIX

SILVER JOURNAL 1786-1806
(MINT 9/212)

A. 1797

	Bags received from Bank				Bags returned to Bank			
	No.	lbs	ozs	dwt	No.	lbs	ozs	dwt
5 March	400	33,332	7	9	-	-	-	-
6 March	-	-	-	-	60	5,000	1	10
7 March	-	-	-	-	60	4,999	9	10
9 March	-	-	-	-	120	9,999	11	7
10 March	-	-	-	-	80	6,666	6	18
11 March	80	6,666	11	0	80	6,666	6	15
13 March	120	10,000	3	1	60	4,999	10	14
14 March	60	5,000	1	16	60	4,999	9	11
15 March	80	6,666	8	15	80	6,666	6	19
16 March	80	6,666	8	17	60	4,999	11	2
17 March	100	8,333	3	11	70	5,833	3	2
20 March	15	1,249	11	10	130	10,833	1	16
21 March	-	-	-	-	75	6,250	6	18
	935	77,916	7	19	935	77,916	2	2

Deficiency 5 ozs 17 dwt

	Bags received from Bank				Bags returned to Bank			
	No.	lbs	ozs	dwt	No.	lbs	ozs	dwt
3 April	80	6,666	11	8	-	-	-	-
10 April	140	11,666	11	0	80	6,666	3	5
13 April	50	4,166	8	19	60	4,999	11	12
15 April	30	2,500	0	19	60	5,000	0	17
18 April	60	5,000	1	15	20	1,666	8	8
18 April	-	-	-	-	40	3,333	5	1
21 April	40	3,333	4	9	60	5,000	1	3
22 April	60	5,000	4	2	40	3,333	4	15
26 April	80	6,667	3	19	60	5,000	1	13
27 April	80	6,666	9	17	60	5,000	1	0
2 May	80	6,666	10	17	60	5,000	1	12
3 May	60	5,000	0	15	80	6,666	8	8
9 May	60	5,000	1	5	80	6,666	9	4
13 May	60	5,000	1	13	60	5,000	0	9
13 May	-	-	-	-	20	1,666	8	7
17 May	100	8,333	4	1	60	5,000	0	17
20 May	-	-	-	-	100	8,333	7	0
23 May	100	8,333	11	5	40	3,334	2	15
27 May	-	-	-	-	50	4,166	9	16
30 May	-	-	-	-	50	4,168	5	19
	1080	90,003	2	4	1080	90,003	8	1

Excess 5 ozs 17 dwt

B. 1799

	Bags received from Bank					Bags returned to Bank			
	No.	lbs	ozs	dwt		No.	lbs	ozs	dwt
23 September	120	9,999	9	5			—	—	
24 September	120	9,999	11	0		70	5,833	3	0
25 September	170	14,166	5	19		50	4,166	7	9
25 September	—	—	—	—		20	1,666	7	16
27 September	—	—	—	—		100	8,333	3	1
27 September	—	—	—	—		40	3,333	3	15
30 September	—	—	—	—		130	10,832	7	0
	410	34,166	2	4		410	34,165	8	1

Deficiency 6 ozs 3 dwt

C. 1804

	Bags received from Bank					Bags returned to Bank			
	No.	lbs	ozs	dwt		No.	lbs	ozs	dwt
3 January	120	10,000	0	0		—	—	—	
5 January	120	10,000	0	0			—	—	
7 January	—	—	—	—		60	5,000	0	0
10 January	—	—	—	—		60	5,000	0	0
12 January	—	—	—	—		60	5,000	0	0
13 January	120	10,000	0	0		—	—	—	
16 January	—	—	—	—		100	8,333	4	0
17 January	—	—	—	—		80	6,666	8	0
	360	30,000	0	0		360	30,000	0	0

Deficiency of 2 ozs 10 dwt to be made good by Moneyers but unclaimed by Bank.
415,080 dollars by tale.

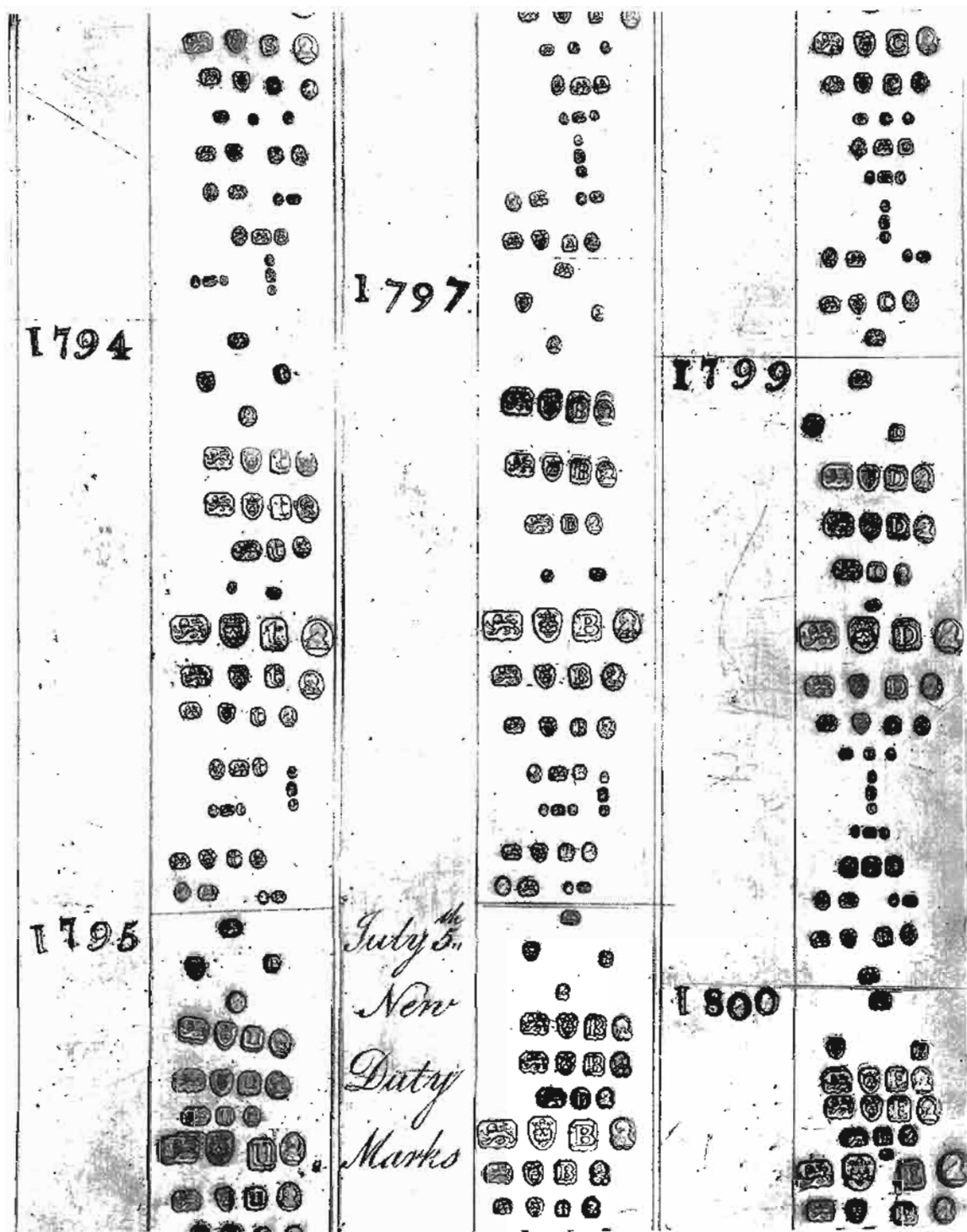
From these official figures, we may deduce that in 1797 the bags of coins forwarded to the Mint by the Bank and returned after stamping did not weigh exactly 1000 ounces, as has been generally assumed. This weakens but does not entirely refute the basis for asserting that the Bank added small coins to the dollars to make up bags of exactly 1000 ounces and that the small coins (and scraps?) would have been stamped as well as the dollars.

The Mint figures of 2,232,395 dollars weighing 167,916 lbs Troy yields an average of 416.30363 grains per dollar coin. The weight of 2,015 bags reported received and returned in 1797 yields an average of 416.31355 grains per coin. Figures for 410 bags in 1799 yield an average of 208.14959 grains per half-dollar coin; those for 360 bags in 1804 yield 416.30529 grains per dollar coin.

These figures justify the assumption that dollars stamped in 1797 and 1804 averaged c. 416.3 grains and half-dollars in 1799 averaged exactly half or c. 208.15 grains. A coin weight provided to test dollars over stamped by Boulton between 1804 and 1811 is marked 17 dwt $6\frac{1}{2}$ grains, i.e. 414.5 grains (Pl. 5, 6), although a recent weighing of this piece gave a figure of 414.8 grains.

KEY TO PLATES

- (7) Silver plate of punch marks (copyright Goldsmiths' Hall; printed with permission).
- (8) 1. Oval mark on 1798 eight reals, dated a year later than dollars were marked at the Mint.
 2. Oval mark on 1803 eight reals, dated six years later than dollars were marked at the Mint (A.J. Byrne collection).
 3. Oval mark on 1806 eight reals, dated nine years later than dollars were marked at the Mint (R. Gladdle collection).
 4. Oval mark on half-real or one-sixteenth dollar, worth $3\frac{9}{16}d.$ at $4s. 9d.$ to the dollar.
- (9) 1. False oval mark on genuine eight reals.
 2. False oval mark on genuine four reals.
 3-6. False oval marks on false eight reals.
- (10) 1. Oval mark on 1738 pillar four reals; ex Fonrobert 6292 (Weyl, Berlin, 1878).
 2. Oval mark on 1761 pillar eight reals; ex Montegazza 62 (Spink 113, 5 March 1996).
 3. Oval mark on 1732 Austrian thaler.
 4. Oval mark on Maria Theresia thaler dated 1780 but struck at Venice in 1818 or later (W. Hafner collection).
 5. Oval mark on 1792 French écu; ex Montegazza 81 (Spink 113, 5 March 1996).
 6. Oval mark on false British halfpenny dated 1775.
 7. Oval mark punched over a false octagonal mark on 1795 dollar; ex F. Cokayne 84 (Glendining, 17 July 1946).
- (11) 1. Enlargement of 1800 Maundy penny, the king's bust adapted for the octagonal punch marks.
 2. Silver trial plate of the octagonal mark (A.J. Byrne collection).
 3. Maundy penny and genuine octagonal mark on 1775 eight reals (National Museum of Wales collection).
 4. Genuine octagonal mark on 1795 eight reals (weakly struck at left as occasionally occurs with genuine marks).
 5. Genuine octagonal mark on 1798 USA dollar.
 6. Dollar coin-weight for 17 dwt $6\frac{1}{2}$ grains (414.5 grains).
- (12) 1-4. False octagonal marks on genuine eight reals.
 5. Fantasy octagonal mark on William III 1696 crown.



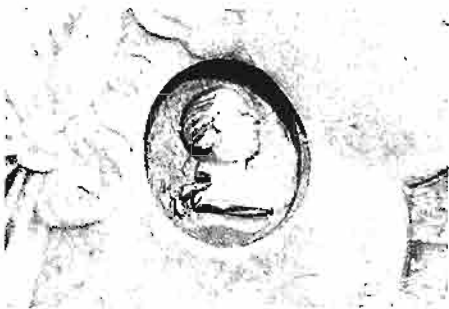
MANVILLE: COUNTERMARKED DOLLARS (1)



1



2

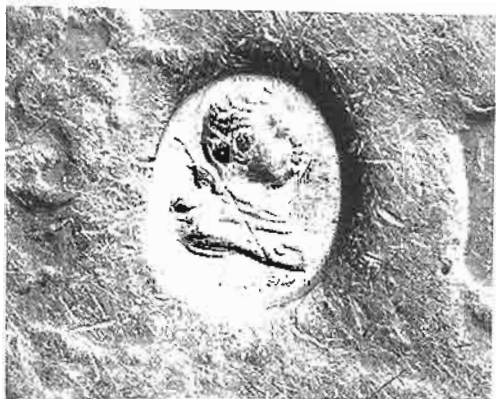


3



4





1



2



3



4



5



6



1a



1b



2



3a



4a



5a



3b



4b



5b



6a



6b



7



1



2



3



4



5a



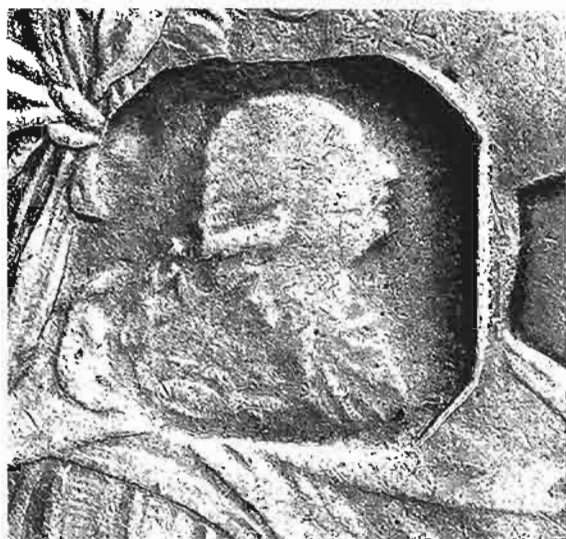
5b



6a



6b



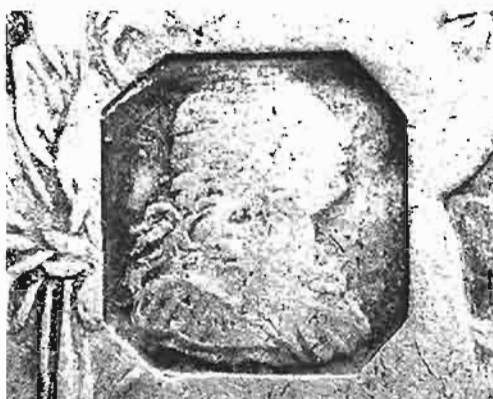
1



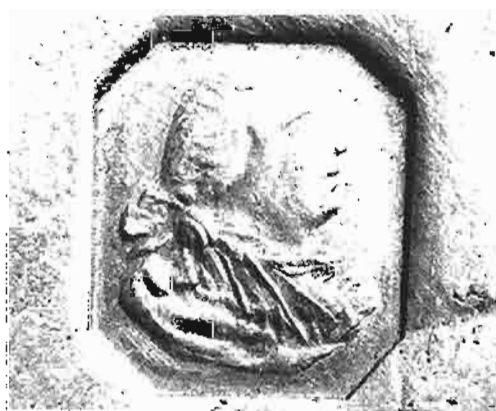
2



3



4



5

THE REDUCING MACHINE AND THE LAST COINAGE OF GEORGE III

KEVIN CLANCY

In the *Numismatic Chronicle* in 1971 Graham Pollard discussed the origins of how the reducing machine came to be adopted in Britain for the production of coinage dies. The machine, which operates by scanning a design and at the same time cutting the transferred details into what is usually a steel punch of the required diameter, came to transform the way in which engravers worked. Pollard explained how in 1790 the industrialist Matthew Boulton at his Soho Mint installed a three-dimensional pantograph imported from the Paris machine-maker Jean Baptiste Dupeyrat. By the second decade of the nineteenth century machines of this type were acquiring a wider appreciation in Britain: the sculptor Sir Francis Chantrey owned a similar kind of device and during the same period Boulton's business partner James Watt designed and built two machines for copying sculptures in the round. The Royal Mint in London, by contrast, lagged behind. But the accepted version of events that this remained the case until 1819, when the Italian artist Benedetto Pistrucci paid for one to be installed for his own use at Tower Hill, may be in need of revision. While the date of acquisition is not in doubt, there is evidence to suggest that the Mint had access to a machine three years earlier, evidence that helps to throw new light on a number of unusual items in the Mint collection.¹

Designing a new gold and silver coinage

In the years 1816 and 1817 the British coinage changed dramatically. During the eighteenth century the silver coinage had lapsed into an increasingly wretched condition, while in the two decades from 1797 the economy had been convulsed by currency instability, the impact of war with France and a measure of uncertainty over government management of the money supply. The advent of the Coinage Act of 1816 signalled the possibility of calmer monetary conditions. With this legislation Lord Liverpool's ministry made a commitment to adopt a gold standard, a change that was to be underpinned by the introduction of a new gold and silver coinage and the withdrawal of the old. Not only had an extremely large number of coins to be struck in just over a year, but there was also the thorny technical problem that arose of how to reproduce in steel designs for the new coins by an artist – Pistrucci – whose skill lay rather in engraving gemstones.

Pistrucci arrived in Britain during 1815 and thereafter 'rose without trace' through the patronage of influential figures such as the President of the Royal Society, Sir Joseph Banks, to obtain within a year the coveted commission of designing a new standard coinage effigy. He was employed by the Mint from the early summer of 1816 and the first work he undertook in this capacity was to prepare a portrait of George III for the new shillings and sixpences (Pl. 13, 1, 2). He submitted his portrait model in jasper (Pl. 13, 3) and this was in turn copied by hand and transformed into steel coinage tools by the Mint's Chief Engraver Thomas Wyon junior. When it came to the half-crown, however, a different effigy was planned, and although copied into steel from a jasper model (Pl. 13, 4) in exactly the same way as the shilling and sixpence obverse, Pistrucci's new portrait of the king met with immediate hostility from within the Mint.²

¹ J.G. Pollard, 'Matthew Boulton and the Reducing Machine in England', *NC*, 7th ser., XI (1971), 311–17. J.P. Muirhead, *The Origin and Progress of the Mechanical Inventions of James Watt* (London, 1854), I, pp. ccxlii–ccxlviii; II, pp. 373–74. PRO. Mint 1/21, p. 15. James Morrison (Deputy Master of the Mint) to the Treasury, 24 December 1819.

² Natural History Museum, London, transcript of Mitchell Library, New South Wales, Banks MS 743.3, Banks to Sir Charles Blagden, 19 August 1816. PRO. Mint 1/54, p. 281, William Wellesley Pole to the Treasury, 19 June 1816. A. Billing, *The Science of Gems, Jewels, Coins, and Medals, Ancient and Modern* (London, 1867), pp. 174, 190–2. J. Bagot (ed.), *George Canning and His Friends* (London, 1909), II, p. 32, Pole to Sir Charles Bagot, 5 July 1816.

The cameo for the half-crown had been completed by the end of September; Wyon copied it into steel during October and trial pieces were available by the second week of November. Having seen a trial striking, Sir Joseph Banks confirmed the misgivings about the portrait that had been expressed by William Wellesley Pole, Master of the Mint during the recoinage, and Pistrucci too was deeply dissatisfied with the manner in which his work had been reproduced. Corrections to the portrait were as a consequence requested but for coins to be available by February 1817 a commitment had to be made to put Wyon's unamended tools into production, a situation that confirmed Pole's distaste for the copied effigy. In an effort to lessen what was expected to be potentially harsh metropolitan criticism, the Master of the Mint gave an instruction that when the new coins were released, half-crowns struck from Wyon's dies were to be sent to the most distant parts of the country (Pl. 13, 5).³

Pistrucci developed his engraving skills making alterations to the portrait in the hope that an amended version would be put into work in place of that prepared by Wyon. A revised effigy was delivered in December but the punch upon which Pistrucci had operated seems almost immediately to have suffered some kind of damage. James Lawson, Superintendent of Machinery, subsequently observed that it had either been heated too severely or that the hardening material had not been well cleaned. Lawson's comments correspond with a reference in Forrer's *Biographical Dictionary of Medallists* to a pattern half-crown, the illustration for which is accompanied by an explanatory note. Attributed to Pistrucci, the note indicates that he had personally amended this particular design, which was indeed different from Wyon's copy, but that the punches were burnt several times at the Mint.⁴ Whether or not this revised effigy would have met with a kinder reception is unclear, but in any case two attempts had been made to generate satisfactory master tools for the obverse of the half-crown and both had failed. Such difficulties led to a different approach. The idea was to contact the Soho Mint to ask if the reducing machine acquired by Boulton twenty years earlier could be put at the disposal of the Royal Mint, in order to generate more faithful copies of Pistrucci's work.

Lawson had been employed for several years by Matthew Boulton before joining the rival government mint and although the reducing lathe was a closely guarded secret – even within the Soho manufactory – it was probably Lawson who originally floated the idea of its potential. Soho had played an important part in equipping the mint at Tower Hill when it was erected during the first decade of the nineteenth century, and now that there were the demands of a recoinage help was again being sought. In the eighteen months from June 1816 over two dozen separate orders were addressed to Soho – now under the control of Matthew Boulton's son, Matthew Robinson Boulton – amounting to a total cost of just over £2,000. Willing co-operation might have been somewhat complicated by tensions in the relationship between the two establishments, stemming in large part from the London mint's resumption of copper production in 1810, an area of work that Soho had hoped to monopolise. Looking to Birmingham for assistance with making its master tools was, nevertheless, for Tower Hill an extension of a well-established system of what had generally been ready co-operation, especially in relation to the less contentious issue of producing silver and gold, where Soho had not realistically expected to be involved.⁵

On 18 December Lawson wrote to Zacchaeus Walker, a senior manager at Soho, asking him to ensure that the 'engine lathe', as the reducing machine was called, be made ready in anticipation of copying some work for the Mint. As events transpired the Superintendent of Machinery had to travel to Birmingham himself, accompanied by Pistrucci, in order to supervise the work. Lawson had the purpose of the mission spelt out to him by Pole in forthright terms: the Mint's engravers had failed to generate a faithful reproduction from Pistrucci's amended die and, in characteristically melodramatic fashion, Pole went on to remark that there was no hope of striking half-crowns

³ PRO, Mint 4/26, Pole to Morrison, 29 September, 10 and 17 November 1816.

⁴ PRO, Mint 11/70, Lawson to Pole, 26 December 1816; Mint 11/71, Pole to Lawson, 23 December 1816. L. Forrer, *Biographical Dictionary of Medallists* (London, 1909), IV, pp. 604–5.

⁵ PRO, Mint 11/70, Lawson to Pole, 25 December 1816. Matthew Boulton Papers (MBP), Box 322, fol. 179, Lawson to Matthew Robinson Boulton, 6 January 1817. Boulton & Watt Collection (B & W), Letter Book 533, pp. 52–4. R. Doty, *The Soho Mint & the Industrialization of Money* (London, 1998), pp. 149, 156, 159–60.

fit to be seen 'or of coining gold coins worth a farthing in any reasonable time'. No hope, that was, unless the Soho reducing machine was successful in making a more acceptable half-crown punch from the cameo. It was intended that the resulting tool would be put into production on 1 January, and although Pole admitted that he was asking rather a lot, it was a typical instance of his forcing progress against the odds; Lawson and Pistrucci, after all, did not arrive at Soho until Christmas Eve.⁶ Indeed, that they should have embarked upon the mission at such a time of year is an indication of the pressure exerted by the February deadline for the issue of the new coins.

The two men spent several days in Birmingham. Amongst other items they took with them punches and matrices for the half-crown, a collar, a turned die and the wax and unfinished gem of Pistrucci's St George and the Dragon.⁷ But in addition to the pressing need for a revised half-crown, there was also a rapidly approaching deadline for sovereign tools. Underestimating the length of time needed to complete a piece of work on the lathe, Mint officials seem to have originally intended not only to address the deficiencies of the half-crown in Birmingham, but also to copy the shilling gem for use as the obverse for the sovereign. Instead of starting with the half-crown, the portrait copied was the one that would appear on shillings and sixpences and, because a punch for the half-crown would probably not have been completed in less than three weeks, the two men were ordered to return to London once work on the shilling gem was concluded.⁸

On their way back to London an axle on their chaise broke and, stranded for some hours, both men caught colds. Their suffering, however, was not in vain because they had with them, in the shape of a portrait punch, an indication of the reducing machine's potential. Although pattern half-sovereigns were struck bearing the design, the shilling effigy that was copied was never actually used on the official gold coinage. There was, nevertheless, general satisfaction with the tool and with the machine on which it had been produced, so much so, indeed, that in writing to Boulton in January Pole thought it 'highly desirable that His Majesty's Mint should possess so valuable a means of securing the advantage of the works of the first artist in Cameo engraving'. Boulton made discouraging noises in response, leading the London mint to look elsewhere for a machine, but this episode reveals that officials were alive to its potential and were willing to invest in one as early as January 1817.⁹

The real facility, however, of the Soho machine from the Royal Mint's point of view was more clearly appreciated in the months that followed the first trial. By early January, with the general issue date for the new silver coins only a few weeks away, Pole abandoned any thoughts of Wyon's copy of the half-crown obverse being kept from seeing the light of day. In view of the Master's unvarnished antipathy towards the original 'Bull Head' portrait, there remained, nevertheless, the difficulty of what to do about a new effigy for the half-crown, and it was the resolution of this issue, in the form of a revised obverse, that kept Boulton's reducing lathe active on behalf of the London mint. A new plan was devised whereby from Wyon's punch part of the neck and shoulder were to be cut away and Pistrucci would retouch the portrait from this new starting point.¹⁰ Although the effect of the alterations was to create a portrait that seems markedly changed, and the overall effect is certainly a good deal less brutish, a common origin can nevertheless be seen from the features of the face (Pl. 13, 6). Master tools for the obverse of the pared down half-crown were available from February and the favour in which they were held led the mint to think of exploiting the facility of Boulton's lathe by sending a punch of the revised portrait to Soho to be copied for other denominations such as the sovereign and the half-sovereign.¹¹

⁶ B & W, Letter Book 533, p. 34, Lawson to Walker, 18 December 1816. PRO, Mint 11/71, Pole to Boulton, 23 December 1816; Pole to Lawson, 23 December 1816.

⁷ PRO, Mint 11/71, Pole to Lawson, 23 December 1816.

⁸ PRO, Mint 11/70, Lawson to Pole, 25 and 26 December 1816; Mint 11/71, Pole to Lawson, 23 and 29 December 1816; Mint 4/27, Pole to Morrison, 3 January 1817.

⁹ PRO, Mint 11/71, Pole to Boulton, 14 January 1817. MBP, Box 322, fol. 179, Lawson to Boulton, 6 January 1817; Box 413, Boulton to Pole, 16 January 1817. B & W, Letter Book 533, p. 35, Lawson to Walker, 11 January 1817.

¹⁰ PRO, Mint 11/70, Lawson to Pole, 29 December 1816.

¹¹ B & W, Letter Book 533, p. 37, Lawson to Walker, 21 February 1817 and p. 40, 21 March 1817.

While the amended portrait was being finished the original was being prepared for issue and Pole lamented 'I am in despair when I think of the number of bad half-crowns we shall issue!'. The press and members of the opposition in Parliament playfully savaged both the effigy and the Mint administration that sought to pass off, as they judged, a wholly inaccurate image of George III. The expression given to the king was thought somewhat troubled, presenting a monstrous caricature rather than a regal portrait. *The Examiner* commented that 'surely the artist must have been a wag or a Jacobin! – perhaps both Jacobin and wag'.¹² Precisely when production of the maligned original half-crown obverse gave way to the new type is not clearly documented. But a possible answer lies in the coincidence of the break in production of all silver coins between 4 March and 21 April, and royal approval of the new design being received five days after the end of the cessation. The plausibility of production not having begun before the first week of March is supported by remarks made by the Master of the Mint in the House of Commons on 5 March when, responding to criticism of the original half-crown, he reported that a new one was in progress and would soon be issued.¹³

The chilly press reception given to the new coins and the chiding opposition within Parliament came and went. The more flattering profile of the king was in prospect and from 21 February the revised half-crown punch that had been sent to Birmingham was actively engaged in generating obverses for other denominations. The efforts of John Busch in operating the reducing machine in his workshop at Soho succeeded in producing copy punches for the sovereign, crown, half-sovereign and double-sovereign. Apart from a technical difference of opinion respecting the precise sizes at which copies were to be made, which resulted in a punch that was intended for the half-sovereign being reproduced at the size of a shilling, there were initially no major difficulties; the machine even seemed to be able to cope with enlarging the half-crown effigy to crown size.¹⁴

More significant difficulties, however, began to emerge from 5 June when the reverse punch for the sovereign, depicting St George and the Dragon, was despatched to Birmingham with the intention that it be enlarged to the diameter of a five-pound piece. From the outset Walker expressed doubts as to the chances of a successful outcome, principally because the errors engendered by augmentation, he warned, would become proportionately more conspicuous. Busch struggled with the challenge for a number of weeks, experiencing along the way the frustration of unsympathetic steel. Rather than the usual time of about a week that it would take to make a tool, over a month went by before a finished punch was despatched to London, and even then it was sent with the proviso of its being not entirely satisfactory. Although the next request was for a smaller scale enlargement from sovereign to double-sovereign, the challenge proved too much for Busch. After ten days the copy was abandoned on the grounds that the lathe could not readily cope with the demands of enlargements from so detailed a design as the St George.¹⁵

The sovereign and the half-sovereign obverses generated at Soho for the Royal Mint were adopted (Pl. 13, 7, 8), but from the first trial tool of the shilling cameo it was apparent that not all the lathe's productions were destined to be developed into official British coins. The punches for the double-sovereign and crown piece obverses were abandoned in favour of alternative portraits of the king, and a revised version of the St George and Dragon for the five pounds was also pursued in preference to the enlargement derived from the sovereign. Pressure to issue the higher value gold coins and the crown piece was much less intense than for the smaller value denominations. Moreover, Pole had an ambition to make coins that he hoped would be regarded as masterpieces of numismatic art and the more leisurely pace attached to striking the remaining denominations presented him with the opportunity of realising his dream. None of the designs employed on the circulating gold and silver coins released in 1817 was, as a consequence, reproduced in exactly the same way on the higher value pieces. In this sense the last coinage of

¹² PRO, Mint 4/27, Pole to Morrison, 5 January 1817. *Parliamentary Debates*, 1st ser., XXXV, cols 895–6 (5 March 1817). *Morning Chronicle*, 19 February 1817. *The Examiner*, 16 February 1817.

¹³ PRO, Mint 4/71, pp. 18–19; Mint 9/33, Account of silver monies coined, 13 July 1816 to 31 May 1817. *Parliamentary Debates*, 1st ser., XXXV, col. 899 (5 March 1817).

¹⁴ B & W, Letter Book 533, pp. 37–45, letters to and from Lawson and Walker, 21 February to 2 May 1817.

¹⁵ B & W, Letter Book 533, pp. 45–50, letters to and from Lawson and Walker, 5 June to 29 July 1817.

George III has two distinct phases, the first being the issues in 1817 of shillings, sixpences, half-crowns, half-sovereigns and sovereigns, while the second comprised the subsequent striking of the crown, double-sovereign and five pounds. All the coins of the second phase were more properly intended for collectors or for presentation purposes than as circulating pieces and this was reflected in the much greater attention that was paid to their design and production.¹⁶

Cameos and punches

Beyond the documentary sources that point to use of the Boulton reducing machine to supply tools to the Royal Mint in 1817, punches and other items in the Mint collection may offer further confirmation of this association. Inevitably the collection is not complete; obverse tools for the crown and the double-sovereign bearing the revised half-crown portrait, and reverse tools for the five pounds with the original sovereign St George have not survived. But more positively there are portrait punches for the sovereign and half-sovereign that in some respects appear to have been generated on a lathe and there are also jasper cameos of George III by Pistrucci that are very much part of the story (Pl. 13, 3, 4, 9).

The tool brought back from Birmingham by Lawson and Pistrucci was copied from a shilling gem and was intended for use as an effigy for the sovereign. In his catalogue of the Mint collection W.J. Hocking identified an undated obverse tool, H544, as a portrait punch for a sovereign, and some of the physical characteristics of this item suggest that it may be the reduction punch that was executed in Birmingham at the beginning of 1817 (Pl. 13, 10). The features of the face have a rather soft-focus quality and the entire surface is covered with concentric lines which, being consistent with the operation of a lathe, hint at the involvement of a reducing machine. An examination of the shilling-size jasper cameo H1803 (Pl. 13, 3) and H544 reveals compelling points of similarity, features that are reproduced seemingly so exactly that it is hard to conceive of their having been copied by hand. If this is the case it would throw fresh light not only on the punch but also on the shilling gem, formerly thought to have only played the role of being a model from which Wyon copied the portrait into steel. It may now be justifiable to assign to this particular cameo a more extended function.¹⁷

What stands against the surviving shilling cameo having been used on a reducing machine, however, is the absence of any kind of damage. Given the pressures that would have been exerted on the surface of the model, the expectation would be that the tracer mounted on the lathe would have left evidence of its path as it scanned the details of the design. The tungsten carbide tracers employed on modern reducing machines leave a definite mark on the surface of nickel-faced electrotype models, but it is not entirely clear from what material tracers used on Boulton's machine would have been made. Some hope of an answer lies in the collection of tracing tools associated with the three-dimensional copying machines in the James Watt workshop in the Science Museum, London. Many of these tools are made of ivory and tend to be fairly blunt, and if tracers of a similar type were employed at Soho on the shilling gem it is unlikely that any significant damage would have resulted. Other tracers from the Watt collection, however, are metal and their use on a jasper model could have left their mark. With these doubts in mind there is the strong probability of an association between the shilling cameo, the sovereign punch H544 and the Soho reducing machine rather than absolute certainty.¹⁸

The portrait punch, referred to earlier as having been reproduced from the half-crown at the size of a shilling rather than a half-sovereign, may also have survived. The shilling-size tool H604 has concentric turning marks and the slightly unfocused appearance that distinguishes H544 (Pl. 13, 11). In addition, an examination of the detail of the design reveals that it bears a persuasive

¹⁶ PRO, Mint 4/27, Pole to Morrison, 17 and 27 September 1818.

¹⁷ Royal Mint Library Accessions Register, 1816–50, pp. 5–6. W.J. Hocking, *Catalogue of the Coins, Tokens, Medals, Dies, and Seals in the Museum of the Royal Mint* (London, 1910), I, p. 165, II, p. 33. The cameo for a surviving pattern sovereign is H1804 and for the half-crown obverse H1802.

¹⁸ I should like to thank M. Harding and M. Wright of the Science Museum for their advice and for the time they devoted to showing me Watt's workshop.

resemblance to the revised half-crown effigy. What also stands in favour of this particular tool being the one that was produced in error is that it has a hardness measure in the region of four times less than that of an average production tool of the period. Being so soft the punch could never have been used to generate other tools.¹⁹

Lawson's letter of 21 February to Walker enclosing a punch of the revised half-crown obverse and requesting that it be reduced to the size of a sovereign indicated the progress that Pistrucci was making in learning how to engrave directly into steel. He will, Lawson remarked, 'soon be able to *cut* any thing as well in this way as with the *lathe*'.²⁰ Of the tools relating to the revised half-crown obverse the portrait punch H584 is of particular interest (Pl. 13, 12). Given that an engraver has worked over the design fairly thoroughly it would be unwise to draw from it firm conclusions, but there are nevertheless areas of the surface that hint at remnants of the neck and shoulder in exactly the positions where one would expect details to have been carved away from the original half-crown. But going beyond this to claim that H584 was the punch actually despatched to Soho and from which copies were made is impossible to confirm.²¹

Over the course of 1816–17 engraving directly into steel gradually became a more important element of Pistrucci's working method, and with the aid of the reducing machine he found himself being supplied with fairly well-defined outlines upon which he could operate. Two tools, sovereign punch H530 (Pl. 14, 13) and the half-sovereign punch H552 (Pl. 14, 14), have been worked on by an engraver but because of the presence, albeit faint, of turning marks similar to those that cover the surface of H544 and H604, there are grounds for thinking that they emanated from Birmingham. The alterations made by the engraver mean that both differ in certain respects from the revised half-crown portrait and so making a definite association between them and the reducing machine is more problematic. But as with the other tools already discussed, there are compelling areas of similarity between the half-crown obverse and these punches that suggest a copying lathe was involved.²²

Conclusion

In his article in the *Numismatic Chronicle* Pollard argued that a reducing machine made its first appearance at Tower Hill after Pistrucci purchased one in November 1819 from Panisset of Paris. Pollard referred to Pistrucci being called to Paris by Pole in the autumn of 1817 and there first encountering the utility of the device. What now seems clear, however, is that the first association began at the end of 1816 through use of the Soho machine, and the first coins struck at Tower Hill from dies that originated on a reducing lathe were dated 1817 – very probably sovereigns. The difficulties experienced over the design of the half-crown were in this sense fortuitous because the Mint was made aware, sooner than would otherwise have been the case, of the benefits of employing a reducing machine. The pressure of work consequent upon the demands of the new coinage and the particular requirements of Pistrucci's methods led the Mint to seek out new forms of technical assistance. There is also some evidence to suggest that a handful of surviving tools from the time reflects and confirms the transition to an alternative way of generating master tools. As the nineteenth century advanced such items as electrotypes and plaster models became the common currency of numismatic art and in themselves they speak of the increasing facility that a new generation of engravers saw in the technology of the reducing machine.

¹⁹ Hocking, *Catalogue*, II, p. 36.

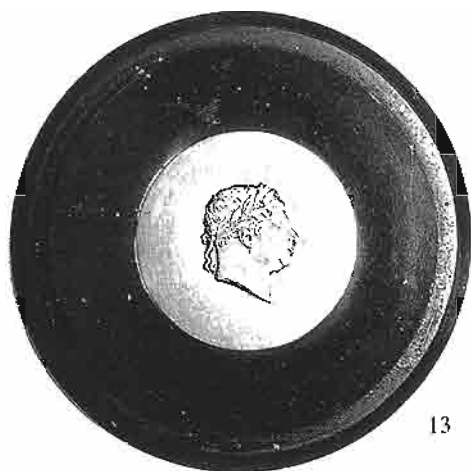
²⁰ The lathe in this instance probably refers to Pistrucci's own gem engraving lathe rather than to the reducing machine.

²¹ Hocking, *Catalogue*, II, p. 36. I am grateful to my colleagues in the Engraving Department for their helpful observations.

²² Hocking, *Catalogue*, II, pp. 33–34.



CLANCY: REDUCING MACHINE (1)



13



14

ENLARGEMENTS



10



11

'COINS OF THE PEOPLE': THE 1967 NEW ZEALAND DECIMAL COIN REVERSES

MARK STOCKER

THE designs of the 1967 New Zealand decimal coinage aroused intensely lively debate and controversy. They provide a rare instance of mass public interest in the visual arts and afford insights into New Zealand's national identity in the 1960s. Indeed, a half-serious claim was made that New Zealanders were turning into 'a nation of numismatists'. Questions were raised of the competence of the New Zealand government in its selection process. At one stage the Royal Mint found itself the unlikely recipient of deep gratitude from the media and public. Newspapers devoted dozens of editorials to the coinage issue and hundreds of letters were published under such pseudonyms as 'Ready for Minting', 'Funny Munny' and 'Don't be Gutless'. In turn, thousands of votes were cast for prospective designs in newspaper polls that played a significant part in the eventual outcome. The controversy even briefly threatened the political future of Robert Muldoon, who recovered to become Prime Minister from 1975 to 1984. This article examines the complex and colourful history of New Zealand's decimal coin reverse designs from the government's announcement of the initial open competition in April 1964 to the choice of the coinage in its final form in June 1966.

First, though, it is necessary to outline the circumstances behind decimalisation. In 1933, the government-appointed Coinage Committee had only superficially addressed the issue. Widespread coin smuggling followed the depreciation of the New Zealand pound in relation to sterling and seriously depleted supplies in the process. The urgent need to create a new silver coinage thus took priority over the long-term benefits of decimalisation. Further delays ensued with World War Two, but even then Allan Sutherland could write in his *Numismatic History of New Zealand* 'when peace returns the reform is not likely to be long delayed'.¹ Although this proved premature, crucial blows for decimalisation were struck by the Labour MP, Rex Mason, who while in opposition introduced parliamentary bills in successive years from 1950–6. In 1959 the report by the Decimal Coinage Committee stressed the advantages of a change-over while recognising that initial costs were high. The Wellington *Evening Post* could claim in 1960: 'Opinion is so strongly ranged on the side of the decimals that there seems little doubt that the change will eventually be made. It is a question of when.'² In the 1960 general election, the Labour and National parties both supported decimalisation. Australia's decision to adopt it, taking effect from 1966, acted as a crucial catalyst, and the Decimal Coinage Act was finally passed in 1964. The minister responsible for supervising the process was Robert Muldoon, Under-Secretary of Finance between 1964 and 1967 and a rising force in Keith Holyoake's National Government.

New Zealand's existing coinage dated mostly from 1933 (Pl. 15, 1). The reverses of the five silver denominations from the half-crown to the threepence were designed by George Kruger Gray, while the penny and half-penny of 1940 were the work of the New Zealand coin and stamp designer, L.C. Mitchell. In the course of its relatively short history, the coinage had earned the affection of collectors and public alike, with the shilling reverse of an armed, crouching Maori warrior being especially popular.³ Indeed, there were calls for the retention of these designs and their redeployment as decimal coins, which intensified when their proposed replacements

Acknowledgements I am very grateful to Betty Beadle, Dr Jillian Cassidy, Graham Dyer, the late William Gardner, Rowley Moffett, Joy Searle, Professor John Simpson and Dr Reg Tye for their assistance with my research.

¹ Allan Sutherland, *Numismatic History of New Zealand: History Reflected in Money and Medals* (Wellington, 1941), p. 286.

² *Evening Post*, 23 August 1960. See also *New Zealand Numismatic Journal*, 12 (1960), 61–3.

³ For the 1933–40 coinage, see Sutherland, *Numismatic History*, as in n. 1, pp. 266–79. Kruger Gray's design was based on Allan Gairdner Wyon's Sir James Hector Memorial Medal reverse. See Mark Stocker, *Golden Atoms: The Ernest Rutherford Medals* (Christchurch, 1999), pp. 33, 79.

appeared unsatisfactory. This was ruled out because conversion required coins of new value as well as denomination. Equally important was the perceived need for an entirely new coinage, suitable for a modern country in modern times. As the Treasury's 'Notes for Guidance' to prospective designers stated: 'It is hoped that designers will arrive at pleasing and attractive designs which will appeal to the public of New Zealand and at the same time help educate them in the use of the decimal system of currency ... The coins should be distinguished and worthy symbols of New Zealand.'⁴

In April 1964, Muldoon announced an open competition for new designs for 1, 2, 5, 10, 20 and 50 cent coins with the closing date of 31 July. A commemorative dollar coin, to mark the change-over, was announced in August. The competition was for reverse designs only, as the Queen's effigy for the obverse had already been commissioned from Arnold Machin and was published in October 1964. The only problem that arose in relation to Machin's design was his initial opposition to the government's request for the date to be inscribed on the obverse rather than the reverse as originally intended. This was soon resolved without attracting media attention.⁵ Lively debate over the name of the major unit of currency also occurred in 1964. Mason favoured the 'double crown', while the designers, Paul Beadle and James Berry, both supported the 'zeal'; other suggestions included the 'tui' (parson-bird), the 'fern' and, an indication of his rising prominence, the 'Muldoon'! Adoption of the dollar, resolved after a parliamentary vote in July 1964, was almost a foregone conclusion, given Australia's decision to use the unit; moreover, a newspaper poll had shown overwhelming support for this option.⁶

The decision to stage an open design competition had precedents in those for the crown pieces of 1949 and 1953; the concept also struck a populist note, with the Minister of Finance, Harry Lake, claiming that it would create 'a great deal of public interest, as well as giving the public an opportunity to express its views on coin designs'.⁷ The competition for the new designs captured the public imagination, attracting over 600 designs from some 160 entrants. The *Southland Times* reported an 'unending' variety of designs, ranging from predictable images such as Captain James Cook's barque, the *Endeavour*, and the tuatara (native lizard), to a schoolgirl's image of 'an elderly woman sitting in a chair knitting, the wool coming from a half-shorn sheep standing nearby'.⁸ The *Matuara Ensign* reported that among the most popular entries were 'fern leaves – a sporting emblem – and Maori meeting houses. Even the shy kiwi has come in for support'.⁹

Despite this enthusiasm, the sculptor and medallist, Paul Beadle, professor of Fine Arts at the University of Auckland, expressed strong personal and professional reservations in a letter to Keith Holyoake. In his capacity as president of the council of the New Zealand Society of Sculptors, Beadle told the prime minister that he was 'profoundly disturbed' by the open competition, which compromised both sculptors and designers. They were expected 'to set aside their practices in a totally unsuitable form on the chance that an unnamed Advisory Board may consider them worthy of a £50 prize'. Clearly, and indeed justifiably, Beadle considered the remuneration inadequate. In his reference to the 'totally unsuitable form', he was expressing misgivings over the stipulation that entries should be black and white drawings, five times the diameter of the actual coins. Relief models were not required, though the guidelines indicated that they could be used to supplement any drawings. Beadle concluded: 'The introduction of an entirely new coinage ... is a rare moment in history ... and it is the occasion for New Zealand to stimulate the imagination and recognise the ability of her own specialists. Any denial of them makes a mockery of the University Schools in which they study and of ... the Queen Elizabeth II Arts Trust, the bodies responsible for the advancement of all the arts in New Zealand.'¹⁰ He also advocated the establishment of a jury representing art and design interests to select the designers, following the Australian model.

⁴ National Archives, Wellington, Treasury Series 79 T10/31, 'Notes for Guidance', n.d. [1964].

⁵ PRO MINT 20/3047, Cyril Hewertson to Alan Dowling, 29 July 1965.

⁶ Robert Muldoon, *The Rise and Fall of a Young Turk* (Wellington, 1974), p. 76.

⁷ National Archives, Treasury Series 79 T10/32, Harry Lake to Paul Beadle, n.d. [May 1964].

⁸ *Southland Times*, 28 August 1964.

⁹ *Matuara Ensign*, 31 July 1964.

¹⁰ Paul Beadle Archive, Auckland, Paul Beadle to Keith Holyoake, 6 May 1964.

The Government independently began to think along similar lines. In May 1964, within weeks of the competition announcement, the Coinage Design Advisory Committee (hereafter CDAC) was appointed. Its members comprised the chairman, J.N.L. (Jack) Searle, secretary of the Decimal Currency Board, Stuart MacLennan, director of the National Art Gallery, A.H. McIntock, the parliamentary historian and former printmaker, John Simpson, professor and head of the School of Fine Arts at the University of Canterbury, Allan Sutherland, past president of the Royal Numismatic Society of New Zealand and a veteran of the 1933 coinage design committee and E.J. Walker, chief accountant of the National Bank. On paper, the committee was admirably qualified and it addressed its brief conscientiously, meeting seventeen times between June 1964 and June 1966. Tantalisingly, only the minutes of its first, anodyne, meeting were deposited with the Treasury papers in the National Archives in Wellington, and the rest are presumed destroyed. However, partial reconstruction has been possible following interviews with Simpson, the sole surviving committee member.

At its first meeting, in June 1964, the committee confirmed Beadle's misgivings when it agreed that while the open competition had been 'good for public relations ...', it was obvious from the entries received so far that artists would have to be invited'.¹¹ Approaches for nominations were made to bodies like the New Zealand Society of Sculptors and the Royal and Australian Mints. Stuart Devlin, designer of the well-received 1966 Australian decimal coinage, rejected his invitation because the £150 fee – later described by Beadle as 'pitiful' – was insufficient. However, the list of competitors as established by September 1964 was impressive. Three, J. Churchward, G. Norfolk and L.C. Mitchell, (designer of the 1940 penny and half-penny reverses), were the survivors of the initial competition. They were joined by Eric Fraser, William Gardner, Milner Gray, Michael Rizzello and Paul Vincze from Britain, and Maurice Askew, Paul Beadle, James Berry, James Johnstone, Francis Shurrock and F.C.W. Staub from New Zealand.

Simpson recalls that the CDAC set about its task with enthusiasm. However, the limitations of its powers were made clear by Searle at the third or fourth meeting, when he explained that it was not up to the committee to determine the designs, but to submit any findings to the government for consideration. In this, and in several other areas, Simpson detects Muldoon's hand. The names of Harry Lake, the Royal Mint and even the Queen herself were all invoked to deem what was and what was not permissible.¹² Lake, as Minister of Finance, was Muldoon's nominal superior, while the Royal Mint would have final sanction in deeming the 'coinability' of the submitted designs and would strike the new coinage. The CDAC was in no position to check the veracity of claims made on behalf of these venerable institutions, although the Queen's alleged objections to the inscription of the date beneath her effigy proved unfounded, it having actually come only from Machin. Simpson believes that Muldoon's role was central in determining the eventual designer of the coinage. Muldoon himself appeared to confirm this in his autobiography, *The Rise and Fall of a Young Turk*, when he stated that he 'assumed full responsibility' for decimalisation, 'working through Cabinet where appropriate and handling the day-to-day public relations problems personally'.¹³ Searle was also a significant player. Throughout the CDAC's existence, he scrupulously followed civil service protocol in representing and, wherever possible, fulfilling the Under-Secretary's wishes. He skilfully avoided being caught between the differing views of Muldoon on the one hand and the committee on the other.

Simpson remembers MacLennan and McIntock as the two dominant members of the committee. In 1964, both were in their early sixties, both senior public servants and both artists. MacLennan was a landscape painter specialising in water-colours while McIntock had exhibited etchings at the Royal Academy. The two men were both predisposed towards designs that were conservative in concept and execution. Until the CDAC's final report, there seemed little to separate their views from those of Sutherland who, notwithstanding his impressive numismatic credentials, contributed relatively little at the meetings. Simpson, as a protégé of Herbert Read

¹¹ National Archives, Treasury Series 79 T10/31, Minutes of the first meeting of the Coinage Design Advisory Committee, 5 June 1964.

¹² John Simpson, Interview with the writer, 29 November 1999.

¹³ Muldoon, as in n. 6, *Rise and Fall*, p. 75.

and an art educator, was ready to consider innovation, boldness and abstraction in designs. The youngest member of the committee, he repeatedly found himself 'in a minority of one'.¹⁴ He admired the entries from the British artists, Eric Fraser, Milner Gray and William Gardner, but believes they laboured at a disadvantage. Although Simpson recalls suggestions being made for them to visit New Zealand to assist their depictions of 'native or national emblems, features, flora, fauna, historical or geographical subjects', this never materialised. In his view this was because of the Treasury's legendary parsimoniousness. Accordingly, Gardner's highly refined designs, which were heraldically strong but indigenously weak, were admired but were not initially selected by the CDAC, while Fraser encountered considerable difficulties in rendering a design representing the native flax to the committee's satisfaction.

Although members agreed that a set of coins designed by a single artist was the ideal option, none received the CDAC's preference. In retrospect, one set does stand out, both for its numismatic and its artistic qualities. Paul Beadle's designs are fresh, lively and yet immediately recognisable in their imagery (Pl. 15, 2). He produced them during six hectic weeks in August and September 1964. Besides his entry of forty-five highly finished drawings and pages of notes describing the technical processes of design and casting, he made over 200 further sketchbook drawings, which show how his ideas evolved. Carefully following the 'Notes for guidance' issued to competitors, he categorised his designs under headings of industry, sport, flora, fauna, Maori decorative arts and heraldry. In Beadle's own short list, fauna predominated: the 1 cent rifleman; the 5 cent tuatara; the 10 cent dolphin ('Pelorus Jack') and rainbow trout; and the 20 cent white heron. Two coins represented other categories: the 2 cent New Zealand Christmas rose (*pohutukawa*) and the 50 cent half-length effigy of a Maori chief. The rifleman is an endearing, indigenous counterpart to the wren of Wilson Parker's British farthing, the smallest bird representing the smallest denomination. The tuatara, which later emerged as one of the public's favourite designs, wittily curls its tail in counterpoint to the curve of the '5'. 'Pelorus Jack' and the rainbow trout take liberties with scale but elegantly follow the curves of the coin. The white heron effectively displays its feathers to fill the coin, as does the flowering *pohutukawa*. Opinions would be divided over the Maori effigy and its success in relationship to the field of the proposed coin is questionable, yet Beadle's double-headed concept shows audacity.

For all their impressiveness – and they have dated remarkably well – none of Beadle's designs were recommended for adoption by the CDAC. Why was this so? Simpson personally supported Beadle, but was outvoted. The qualities that he admired in them, 'their strength, simplicity, robustness and directness', were considered 'overstated, overpowering, even coarse' by the other, more conservative members.¹⁵ According to Beadle himself, critics found his proposed coinage 'too much like designs, not natural enough, impossible to strike, etc.', though museum curatorial staff he consulted 'expressed the view that I had achieved a happy marriage of design and naturalism'.¹⁶

In rejecting the Beadle designs, the CDAC appeared to have avoided a risky and politically unacceptable option. Instead, an uneasy compromise appears to have been struck, with the selection of cautiously modern designs for the lower denominations and a more pictorial conservatism for the higher value coins. By December 1964, three designers had been invited to submit further drawings and, in the following March, Simpson could write to Searle: 'I am looking forward to our next meeting ... The designers who have been commissioned are capable of producing the finest work.'¹⁷ For the 1 cent coin, Milner Gray's simple but effective Southern Cross design (Pl. 16, 3) was initially favoured; for the 2 cent, Eric Fraser's flax (Pl. 16, 4); and for the 5 cent, formalised geysers based on those of the Taupo Volcanic Zone by the same artist (Pl. 17, 5). For the higher denominations, designs by Francis Shurrock were selected: the 10 cent *tekoteko* (gable figure) motif, the 20 cent Rugby Union player and fern-leaf and the 50 cent high country musterer on horseback (Pls 17–18, 6–8).

¹⁴ John Simpson interview, 29 November 1999.

¹⁵ Ibid. For Beadle's coinage and medal designs, see also Mark Stocker, "'Pommie-Aussie-Kiwi': Paul Beadle, Medallist", *The Medal*, 33, (1998), 83–97.

¹⁶ Ibid., p. 89.

¹⁷ National Archives, Treasury Series 79 T10/31, John Simpson to J.N.L. Searle, 17 March 1965.

In his letter to Searle, Simpson qualified his optimism when he added 'I am not of course suggesting that there will not be many alterations and difficulties'. He was right. The only design which needed no modification other than the omission of the date was Gray's simple but effective 1 cent Southern Cross. Far greater difficulties arose over both Fraser's designs. After initially accepting his 2 cent flax design, the CDAC then had second thoughts. According to Sutherland, the design was botanically incorrect and there was 'too much distortion for artistic effect'.¹⁸ Simpson defended the original design, claiming that a degree of abstraction was desirable but failed to convince his colleagues. The design was then modified, curiously not by Fraser but apparently by the Committee itself (Pl. 19, 9). According to some contested accounts, the design was actually handed over to Shurrock to make the necessary changes.¹⁹ By November 1965, when the designs were submitted to the Royal Mint for consideration, the situation was still unresolved. Fraser telegraphed the CDAC to explain that his design was based on a central, straight form spreading horizontally, around which his other shapes were spread so as to complete it. In the committee's revised version, the central shapes 'had now been collapsed into a broken form and the mainstay of the design has been broken'. The centre needed strengthening: 'Straight lines now replace curves and the leaves as now drawn do NOT stabilise the centre. The result is NOT pleasing as design.'²⁰ Fraser insisted that if the design was adopted in its revised form, he would not wish it to go under his name. He concluded by asserting that artistic licence should be allowed and that 'design is rarely exact reproduction of nature', just as Simpson had tried to tell his colleagues. Fraser then prepared a revised design, which, together with his original version and that of the CDAC, was submitted to the Royal Mint (Pl. 19, 10).

Fraser's 5 cent design posed even greater problems. It underwent at least four versions between late 1964 and mid 1965. Fraser was first asked to shift the date from the bottom of the design to the sides; then, in his next version, he omitted the date and enlarged the geysers and figure. This elegant, yet graphically powerful design (Pl. 17, 5) would have made an outstanding coin and reflects the disciplined vitality that characterises Fraser's art.²¹ When shown the design, the Cabinet thought otherwise, perhaps objecting to its modern semi-abstraction. Fraser was next asked to add the motif of a long, white cloud over the geysers, an allusion to *Aotearoa*, the Maori name for New Zealand (literally 'land of the long white cloud').²² The revised design was also rejected and Fraser was then asked in September 1965 to concentrate on mountains and cloud, with the geysers omitted. It is hardly surprising that at this stage, he did not oblige. In October, with the time-table running some nine months late and with decimalisation only twenty months away, the CDAC itself assumed responsibility for the 5 cent reverse design. McIntock prepared a drawing depicting sunrise and long white clouds over Milford Sound which received tentative, last minute Cabinet approval (Pl. 20, 11). E.J. Walker told Simpson: 'I think it would be true to say that panic has been at the root of the trouble. When Cabinet turned down both the Fraser designs and wouldn't consider any of the others, a dead end was reached. The *Aotearoa* designs were produced and Cabinet (without reference to the Committee) asked for them to be drawn up.'²³ Sutherland rightly observed that the design was too big a subject for such a small coin, but overdue deadlines meant that such niceties were ignored.

Shurrock's 10 cent, 20 cent and 50 cent designs posed different problems. When he submitted his entries, he was in his late seventies and had behind him a distinguished career as a teacher at the Canterbury College School of Art and, though inactive in recent years, as a sculptor.²⁴ Before emigrating to New Zealand in 1924, he had studied sculpture and medal design with Edward Lanteri at the Royal College of Art. Shurrock was a friend of McIntock and his careful

¹⁸ Ibid., Allan Sutherland to J.N.L. Searle, 10 May 1965.

¹⁹ *New Zealand Herald*, 19 February 1966. In the *Christchurch Press* (24 February 1966), Shurrock denied that he had seen Fraser's designs until 22 February and claimed his flax drawing had been requested by the CDAC. This has been confirmed by John Simpson.

²⁰ *New Zealand Herald*, 19 February 1966.

²¹ See Sylvia Backemeyer, *Eric Fraser Designer and Illustrator* (London, 1998).

²² *New Zealand Herald*, 19 February 1966.

²³ E.J. Walker to John Simpson, 28 October 1965.

²⁴ For Shurrock, see Mark Stocker, *Francis Shurrock: Shaping New Zealand Sculpture* (Dunedin, 2000).

conservatism as well as his belief that the coins should reflect 'New Zealand and New Zealanders' met with approval from the CDAC. While he had some reservations about Shurrock's suitability, Simpson, as a fellow Christchurch resident, liaised closely with him throughout 1965 and encouraged him, not always successfully, to modify his designs in accordance with the committee's wishes. Simpson recalls how Shurrock was 'really enthusiastic about the prospect ... in some ways this would be the most public work that he would ever undertake and would be in everybody's purse and pocket'.²⁵

All three of Shurrock's designs needed modification. The 10 cent reverse originally featured a full-length *tekoteko* figure (Pl. 21, 12) used in almost identical form in two of his earlier designs, an unadopted 1940 New Zealand centennial penny and in the 1949 Margaret Condliffe Memorial Award Medal. This recycling was evidence of the elderly artist's waning powers of invention. In the course of its development, the figure was reduced to a head and two *manaia* (Maori canoe prow carvings) were added either side of it. The 20 cent rugby player appears to have been derived from another unadopted design for a 1940 penny, this time by the Anglo-New Zealand artist, Christopher Perkins. In the draft of a government press release intended to accompany the design's announcement, Shurrock stated that this coin was intended to convey New Zealanders' 'natural ability and interest in sport' and was influenced by recollections of his friend, Geoff Alley, the great All Black lock of 1926–8.²⁶ Although he was asked to omit the fern-leaf motif from the design as early as November 1964, Shurrock's failure to do so is evident in the design submitted to the Royal Mint a year later. He also ignored the CDAC's suggestion that the player be given a 'more active' pose. Simpson's patient support notwithstanding, Shurrock adopted, according to Sutherland, 'a semi-dictatorial tone in his letters to the Committee. I look for improvements in the features of the musterer'.²⁷ This last design, for the 50 cent reverse, is sparsely documented; originally Shurrock had intended the coin to bear an effigy of Cook but possibly as a result of Fraser's stylised design of a musterer, Shurrock was asked to prepare a more conventional rendition of the same theme. It is clear that in the course of working on the design, Shurrock was troubled by the many minute details of sheep and blades of grass which would be invisible to the naked eye when reduced to coin size. In assessing Shurrock's designs it is difficult to avoid being influenced by the outcry that they caused on their publication. The 10 cent *tekoteko* design is iconographically appropriate and has sufficient graphic qualities to make it a distinctive, yet serviceable coin and the 50 cent musterer possesses considerable nostalgic charm. Less can be said to defend the 20 cent rugby player. Simpson still considers Shurrock's designs 'beautifully worked out', yet he concedes that 'they would make New Zealand appear to be fossilised in the 1920s'.²⁸

By July 1965, Searle could telegraph 'six reverse designs virtually settled' but it was another four months before the drawings were sent to London. In late November, Muldoon indicated that they needed to be viewed by the entire Royal Mint Advisory Committee and that its findings would be announced in the New Year. In words that would haunt him, he asserted that 'we have no reason to believe that any substantial alteration to the designs will be suggested'.²⁹ None of Fraser's geysers were included; instead McLintock's landscape design was submitted, as were all three versions of the flax. When he received the drawings from Arthur Ashley-Jones of the New Zealand High Commission, Cyril Hewertson, Chief Clerk of the Royal Mint, immediately suggested that further alternatives should be made available 'as it was difficult to comment satisfactorily on the basis of the one selected set'. They were not forthcoming. Ashley-Jones told Hewertson that the CDAC was 'quite firm in not wanting to show any alternatives to the Advisory Committee. The particular designs submitted appear to have been chosen from a wide selection and the New Zealand authorities appear to have committed themselves to their acceptance'. In turn, Hewertson left Ashley-Jones 'in no doubt that in my opinion the Advisory Committee's views might be critical of the

²⁵ Ibid., p. 86.

²⁶ National Archives Treasury Series 79 T10/64, v. 2, n.d.

²⁷ Allan Sutherland to John Simpson, 24 October 1965.

²⁸ Stocker, *Francis Shurrock*, as in n. 24, p. 87.

²⁹ *Evening Post*, 26 November 1965.

particular designs'.³⁰ While its role was, as its name implies, to give advice, the Committee's influence – reflected in the prestige of its membership and its experience – was considerable. Certainly the New Zealand government had no wish to be on a collision course with the Royal Mint and, at this stage, none was anticipated.

The Advisory Committee confirmed Hewertson's misgivings. In his minutes of its meeting, he noted: 'Members were unanimous that apart from those for the 1 and 2 cents, the reverse designs were extremely poor and most members were inclined to doubt whether the artist concerned was likely to produce acceptable alternatives even in the light of the Committee's comments.' The Committee felt that 'too much had been attempted' in the 50 cent design. The denominational value would be lost in the foreground at coin size and even the sheep would be unrecognisable, while the horse and rider were 'poorly drawn'. The 20 cent design was also 'badly drawn' and the fern motif would not be recognised at coin size. The 10 cent design 'would not succeed unless considerably modified. The words were too small and so were the manaia heads'. The verdict on the 5 cent design was even more damning: 'altogether unsuitable for a coin design ... impossible to model it in a way that would make the various features identifiable at coin size'. Fraser received scant consolation for his flax designs, which were considered 'undistinguished' though 'just acceptable as coin designs'.³¹ No comment was made on the 1 cent design though its 'coinability' was confirmed.

Prince Philip, Duke of Edinburgh, wrote in his capacity as President of the Advisory Committee to Thomas Macdonald, the High Commissioner, explaining the details, 'in case the New Zealand Government feel that the Committee have been a trifle rough in rejecting the designs'. He attached his own terse comments, which stated of the 50 cent design 'I am afraid that any rider would find a lot to criticise' and of the 20 cent 'I can't believe even Rugby footballers would like to see this on a coin'. Prince Philip added: 'I quite appreciate that the New Zealanders would like their coins to be designed by a New Zealand artist' and tactfully suggested that Shurrock might visit London 'to work up another set of designs in conjunction with the Mint technicians'.³² Given Shurrock's age and health there was no question of this and the damage, moreover, had been done.

Remarkably, Simpson claims that the CDAC was not properly informed of the Advisory Committee's decision and neither was Shurrock, who was allowed to continue working on the plaster models based on his designs for another six weeks. Perhaps in Muldoon's eyes, the CDAC and Shurrock alike had largely ceased to count. A precaution was, however, taken in late December when five artists, Eileen Mayo, Juliet Cowan, T.V. Johnston, T.J. Taylor and, for a second time, James Berry, were invited to submit further designs. Sutherland was privy to this decision and drafted guidelines for the designers. He told Searle in tones of some urgency: 'The average user of the coins will wish to be able to look at a New Zealand coin and say "This is New Zealand". Bold simplicity is preferable with coin design ... Subjects not wanted – trees, clouds or stream, wheatsheaf, crown, Maori only.'³³ Eileen Mayo's diary entry for 31 December 1965 vividly recounts the reaction of this distinguished Anglo-New Zealand artist and designer to her involvement: 'A letter from Wellington (must be Income Tax I thought) from the Treasury, asking me to submit designs for some of the coins they haven't got designs for yet – by the end of January! Why do they leave things till the last minute! Main thing is they suggest a trip to Wellington, which will be fun. But even more imp. is what this has done to my morale. Instead of being a hollow shell, I have some heart in me again.'³⁴

On 28 January 1966, the *Evening Post* hinted that the coinage might be redrawn. Its well-informed sources indicated that the submitted designs, apart from the 1 cent and 2 cent coins, were considered 'inartistic and inappropriate' by the Royal Mint. 'One design in particular, if allowed to go through, would be likely to cause a loud groan – it illustrates a certain national sport (amazingly there are no intentions to make the coin oval) ...'. It warned that 'consideration might

³⁰ PRO MINT 20/3047. Cyril Hewertson to Alan Dowling, 7 December 1965.

³¹ Ibid., Cyril Hewertson to Arthur Ashley-Jones, 21 December 1965.

³² Ibid., Prince Philip to Thomas Macdonald, 20 December 1965.

³³ National Archives Treasury Series 79 T10/32, Allan Sutherland to J.R.L. Searle, 6 January 1966.

³⁴ Eileen Mayo, Diary entry, 31 December 1965 [Private Collection, Christchurch]. For Mayo, see *Eileen Mayo: Painter/Designer*, exhibition catalogue (National Library of New Zealand, Wellington, 1992).

be given towards completely redesigning the coins', otherwise the Treasury might face an outcry.³⁵ Three days later, the newspaper went on to praise 'the vigilance and good sense of the Royal Mint committee' for its verdict on the designs, and lambasted the government for its 'lofty indifference to public opinion' over the issue.³⁶ Then, on 2 February, the drama broke out in full force.

'Thumbs down from the Royal Mint' read the *Evening Post* headline on that day. 'Thank God for the Royal Mint' was how Searle – a devout Baptist – later remembered it.³⁷ Crude versions of several drawings considered by the Mint were leaked to the press by an unknown source, probably within the Treasury, but which has never been disclosed. A public outcry ensued, as predicted, but of a magnitude that even the *Evening Post* underestimated. Headlines and editorials over the next ten days blared: 'Those Coins: They Should be Scrapped' (*Star*), 'Defacing the Coinage' (*Otago Daily Times*) and 'Raspberries for those Cents' (*Bay of Plenty Times*). By the 7 February, the *Evening Post* had received so many letters about the designs that it was 'impossible to print them all'. Readers referred to the 'abysmal standard' of the designs and, less elegantly, their being 'b- terrible' and 'just rubbish'. Norman Kirk, leader of the Labour Opposition, called the proposed coins 'as unimaginative as the Cabinet which approved them'. Hamish Keith, Keeper at the Auckland City Art Gallery, asserted that 'the people of New Zealand are mature enough to want something better than Mickey Mouse fun money'.³⁸ Numismatists were no kinder. 'The selected drawings were of no artistic merit,' claimed B.R. Williams, president of the Auckland Numismatic Society, while the vice-president, L.K. Gluckman, called them 'unbelievable, devoid of artistic merit and an insult to our national heritage ... If you are going to show a player clutching a football to his chest as a national symbol, you might as well include the six o'clock swill or a bottle of Hokonui whisky'.³⁹ The designs were a gift for cartoonists. (Pl. 20, 13) In Gordon Minhinick's version of the 10 cent coin, the Maori motifs were amusingly replaced with the Kiwi family car and boat. While invective and facetiousness set the dominant tone, M.H. Holcroft, in an editorial in the *New Zealand Listener*, was a little more constructive in his criticism. He condemned 'the clutter of detail around the man on the horse, the woodenness of the footballer', the 'banality' of the Maori mask, flanked by the *manaia*, 'looking rather like mice' and the 'scenic congestion' of the five cent piece.⁴⁰

Beadle himself entered the fray by leaking his designs to the *Auckland Star*, which published them on 3 February. He told Mayo 'I was one of the twelve invited to submit designs. I was thanked profusely and paid pitifully ... I realised that my designs were thrown in the direction of the W.P.B. Then the leakage of the rubbish ... Your news that five people – I don't know if within or without the original twelve – have been so recently been briefed ... confirm my worst thoughts about the Treasury and its bunch of nincompoops ... and prostitutes of the arts that I owed them nothing and had nothing to lose by publishing my designs.' He reserved special abuse for Muldoon, whom he called 'a flabby, putty like slob'.⁴¹ Beadle's fellow designer, Fraser, was also uncomplimentary: 'They do look like illustrations from a children's colouring book, don't they?'⁴²

For once, as Muldoon later admitted, 'I was at a loss to know what to do'. His annoyance over the leak and his initial attempts to defuse the controversy by defending the designs were badly received by the press, which till then had praised his acuity and energy. In a leader, the *Evening Post* thundered: 'The Under-Secretary is clearly piqued that the public should get to know anything at all about what his own Minister of Finance [Lake] described some time ago as a matter of great public interest. The cavalier attitude adopted over the decimal coins ... cannot do other than

³⁵ *Evening Post*, 28 January 1966.

³⁶ *Ibid.*, 31 January 1966.

³⁷ J.N.L. Searle, 'The Money in Our Pockets', in J.R. Tye, *The Image Maker: The Art of James Berry* (Auckland, 1984), p. 150.

³⁸ Stocker, *Francis Shurrock*, as in n. 24, p. 91.

³⁹ *Ibid.* Until 1967, New Zealand public houses served their last orders at 6 p.m.

⁴⁰ *New Zealand Listener*, 25 February 1966.

⁴¹ Eileen Mayo Archive, Alexander Turnbull Library, National Library of New Zealand, Paul Beadle to Eileen Mayo, 3 February 1966.

⁴² *New Zealand Herald*, 19 February 1966.

infuriate people. Does not Mr Muldoon realise that this is the sort of attitude which, if persisted in, can bring a government down? Somebody ... will have to make it plain that there must be no further attempts to foist these pathetic designs, or anything resembling them, upon the community.⁴³

Initially the government refused to reconsider the designs but by 5 February it yielded to pressure, when Muldoon conceded that changes could be made if the Cabinet agreed. He stressed that 'the designs are being reconsidered now and have been under reconsideration for some weeks' and added 'there will be no difficulty if we do decide to change any design'.⁴⁴ This did not satisfy his critics, Kirk noting that 'Much of the bother could probably have been avoided had the government taken the public into its confidence on this question'.⁴⁵ 1966 was an election year and any perceived governmental arrogance was a liability. With Muldoon temporarily sidelined, on 8 February the more conciliatory Lake released photographs of the entries though none of the leaked designs were included. Lake claimed that the Government was now 'quite prepared' to change the designs and 'welcomed more public reaction on the coins because we want to produce something that is widely acceptable'.⁴⁶

A personal letter from Holyoake to Shurrock, apologising for the 'unofficial release' of the drawings and thanking him for his work on the designs, was scant consolation for the artist. Shurrock's attitude, amidst the outcry, was restrained. However, he felt compelled to tell his version of the story in the form of an article in the *New Zealand Weekly News*, under the headline 'Sculptor Hits Back in Battle of the Coins'. In it, he explained that the leaked drawings were intended 'merely for publicity purposes' and went on to discuss the careful work that went into his range of designs. He defended his artistic integrity, he asserted that 'public opinion, unless informed, is merely that of "likes and dislikes"' and he condemned the press for pandering to popular prejudice'.⁴⁷ In a letter to the *Otago Daily Times*, he ruefully observed that 'When one considers ... the dangers that will threaten New Zealand should the French carry out their experiment with the atom bomb, it would appear that never has so small a matter over small things cost so much or caused such a furore'.⁴⁸

To the government, the coinage was no small matter. In mid-February, the National Party Caucus, comprising MPs outside Cabinet, participated in a poll to choose their preferred designs. Not one of the initial leaked designs was chosen and nor was there any support for Beadle's designs, which were attracting considerable media admiration. No single designer or design received unanimous support: indeed, Mitchell's and Berry's fantail designs were joint favourites for the 1 cent. Other Caucus 'winners' comprised Mitchell's 5 cent tui and 20 cent kiwi, Norfolk's 5 cent fern-leaf and Rizzello's 50 cent map and Southern Cross. For the 10 cent coin, the Caucus wanted to retain Kruger Gray's shilling design. According to Holyoake, the poll was intended to show that it was 'impracticable to achieve unanimity or even general agreement on a full set of designs from a representative group of New Zealanders'.⁴⁹ This disingenuous move backfired, provoking immediate accusations that 22 National Party MPs did not constitute a properly representative group.

At the same time as the publication of the Caucus poll, Muldoon compounded the government's problems while on a visit to Melbourne, to observe Australia's change-over day at first hand. He remarked to a journalist that some people would say that 'it doesn't matter what's on the coins so long as you have enough of them'.⁵⁰ The comment was intended as a throwaway line and reflected Muldoon's barbed wit. In the circumstances – and with comparisons being made between Devlin's impressive Australian designs and their New Zealand counterparts – it was remarkably ill-judged. In response the Labour MP, Colin Moyle, dubbed Muldoon 'the 10 cent Mussolini'. An embar-

⁴³ *Evening Post*, 4 February 1966.

⁴⁴ *Auckland Star*, 5 February 1966.

⁴⁵ *Ibid.*

⁴⁶ *New Zealand Herald*, 9 February 1966.

⁴⁷ Stocker, *Francis Shurrock*, as in n. 24, p. 92.

⁴⁸ *Ibid.*, pp. 92–3.

⁴⁹ *Auckland Star*, 18 February 1966.

⁵⁰ Muldoon, *Rise and Fall*, as in n. 6, p. 77. See also Barry Gustafson, *His Way: A Biography of Robert Muldoon* (Auckland, 2000), p. 85.

rassed Holyoake publically criticised Muldoon, saying 'Known public opinion does not support such a statement'.⁵¹ Privately, he warned Muldoon that 'the press would ruin me if I could not get out of this'. Muldoon realised that he was only 'mildly exaggerating. We were all worried stiff'.⁵²

'Get out of this', Muldoon did. On 11 March he announced that any future designs selected for sending to the Royal Mint would be publicised. The CDAC held a meeting on 15 March when, in crisis mode, it chose 26 designs. Of those originally leaked, only the 1 cent, 2 cent, 5 cent and 10 cent designs remained and, with the exception of Shurrock's 10 cent *tekoteko*, these received little public support. Fraser's 5 cent geysers spouted forth once more, despite their earlier rejection by the Cabinet. The selection also included entries from the second tier of competitors, with Berry and Mayo being chosen. Muldoon explained that 'some of the designs released received only minority support but the committee kept in mind the fact that birds and flowers will appear on the decimal banknotes and have also appeared on postage stamps'.⁵³ Photographs of the designs were released to the press and, for the first time, the government's move was described as a 'step in the right direction'. One question remained. Who would decide the outcome? Should it be the CDAC, which was discredited in the public eye? Or the Royal Mint, whose role was invaluable but primarily technical? Or the Government, which had bungled the affair? Or should responsibility lie with the people of New Zealand?

With the government's blessing, voting forms were published in leading newspapers in late March. 'Democracy at work!' Muldoon later crowed. The level of public interest in the proposed designs was indicated when the *Evening Post* alone estimated receiving 'about 27,000 votes from 4500 readers who were definite about the designs that they wanted to jingle in their pockets'.⁵⁴ Prior to the polling, Beadle's designs had monopolised acclaim, particularly from within his Auckland base, where he enjoyed youthful and vociferous support. A petition organised by three teenagers calling for the adoption of his designs attracted over 3000 signatures. However, in the subsequent newspaper polling, although Beadle retained strong Auckland support, a new favourite now appeared in Berry. The *Auckland Star* carried the headline: 'Public Quick to Choose Its Favourites: Berry in Front with 1c, 2c and 20c'.⁵⁵ Even Beadle's much admired 5 cent tuatara design was eclipsed in popularity by Berry's 20 cent kiwi, which received 78% support. (Pl. 21, 14) When votes were aggregated nationally, Berry was the leading designer for four coins, although the margin between his 50 cent *Endeavour* design (Pl. 21, 15) and Beadle's Maori chief was extremely narrow.⁵⁶ The 'Beadles' had been replaced by 'The Rocking Berries' at the top of the numismatic hit parade!

James Berry was New Zealand's best-known medallist, coinage and stamp designer of the twentieth century. (Pl. 21, 16) He was a self-made phenomenon: a hyperactive and competitive but highly likeable designer, artist, dealer, collector and family man. He was experienced in the coinage field, having designed reverses for the New Zealand crowns of 1935 and 1949, the 1947 Fiji threepence reverse and numerous commemorative and institutional medals. Of all the competitors, he was the most prominent in numismatic circles, having served as secretary of the Royal Numismatic Society of New Zealand in 1946-7 and president in 1961-2. Berry's story is sympathetically told in J.R. Tye's *The Image Maker: The Art of James Berry* (1984), which contains

⁵¹ *Dominion*, 18 February 1966.

⁵² Muldoon, *Rise and Fall*, as in n. 6, p. 77.

⁵³ *New Zealand Herald*, 23 March 1966.

⁵⁴ *Evening Post*, 15 June 1966.

⁵⁵ *Auckland Star*, 25 March 1966.

⁵⁶ The full results, published in the *Auckland Star* on 9 April 1966 were as follows:

One cent: Fernleaf (Berry), 66% popularity; Southern Cross (Gray), 16%; rifleman bird (Beadle), 14%; mountain daisies (Mayo), 4%.

Two cent: Kowhai (Berry), 72%; flaxbush (Fraser), 15%; pohutukawa (Beadle), 13%.

Five cent: Tuatara (Beadle), 63%; thermal activity (Fraser), 20%; wheat sheaf (Gray), 13%; blue cod (Shurrock), 4%.

Ten cent: Maori mask (Shurrock), 48%; dolphin and trout (Beadle), 30%; tuatara (Berry), 22%.

Twenty cent: Kiwi (Berry), 78%; swordfish (Mayo), 13%; white heron (Beadle), 7%; athletes (Mayo), 2%.

Fifty cent: Endeavour (Berry) 42%; Maori chief (Beadle) 38%; crown (Gray), 11%; shearer (Mayo), 9%.

Commemorative dollar: Coat of Arms (Gardner) 47%; punga fern (Mayo), 29%; mace (Berry), 18%; heraldic ship (Gray) 6%.

Searle's careful and circumspect essay on his role in the coinage.⁵⁷ At the committee stage, Berry's only apparent supporter had been Searle, whom Simpson recalls seeking favourable comments for his designs. In Simpson's view, they did not merit serious consideration and were 'best passed over in silence'.⁵⁸ While there is no suggestion that Searle exercised any improper influence, he had opposed drawing up a short-list of entries, which meant that Berry was still in the running in February 1966. The invitation to Berry to submit a further set of designs in late 1965 further improved his chances. Sutherland also discreetly supported Berry. At one stage he told Simpson that five of Berry's designs should be considered for the problematic 5 cent coin; he also approved of 'Berry's idea' for coinage themes in a letter to Searle in January 1966.⁵⁹

Further factors favoured Berry's designs. Although his unadopted lamb, cattle and racehorse designs (Pl. 22, 17–18) are hardly more convincing than Shurrock's rugby-player and musterer, at his best Berry's competence, though conservative, is indisputable. His pictorial techniques and careful realism impressed the public, who failed to realise that attractive drawings do not necessarily translate into outstanding coins. Berry's clever strategy of drawing the series in white on a black background enhanced their appearance to the public (Pl. 22, 19–21). Very few observers noted this: Kenneth Clark later did so, as did one J.L. Hector-Barry of Auckland, who said 'the coins would not appear this way. Professor Beadle's flat relief presentation enabled a fairer comparison to be made'.⁶⁰ Berry was also fortunate in the themes of his shortlisted coins: fern leaves were more familiar than riflemen, and kiwis were more appealing and distinctively 'New Zealand' than swordfish. Commenting on the selection process, the sculptor, Molly Macalister, stated 'It was a pity the public were not able first to choose the symbols they want. Then the government could get the designers to work on them'.⁶¹ By March 1966, this option was far too late to consider.

Beadle's eclipse caused some distress to his admirers, especially other artists. The Auckland painter and photographer Eric Lee-Johnson condemned the polling method as 'worthless'. Voting would only have any meaning if confined to 'sculptors and designers whose judgments are based upon special knowledge and a high level of aesthetic appreciation'.⁶² Lee-Johnson believed that his view was confirmed by the interior of the home of an average New Zealander, 'with its preference for the mediocre and undistinguished'. His opinions clashed with New Zealand's proud self-image as an egalitarian, participatory democracy and few dared support him. Lee-Johnson's comments inspired an *Auckland Star* cartoon in which a bearded and unkempt modernistic artist tells his friend 'Pity they haven't got our taste!' Berry, by contrast, claimed that the polls reflected 'a healthy interest in design work'.⁶³ When he later heard of Operation 'Coin Poll', Prince Philip commented with amused scepticism: 'I must say it is quite a novel idea to put the designs to the test of public opinion polls. It's reasonably easy to do this in a relatively small country such as New Zealand. I fancy we would be in some trouble if we tried it here!'⁶⁴

In April 1966, the Royal Mint received thirty photographs of prospective designs from the New Zealand government for circulation to the Advisory Committee. They comprised the 26 that featured in the poll, together with four further designs, all of which were by Berry. The additional designs were of an alternative 5 cent coin to Shurrock's original *tekoteko*; a 5 cent huia based on the existing sixpence; a similar modification of the existing shilling for the 10 cent; and a second version of the 20 cent design, representing a South Island kiwi. The government made it clear that it preferred Shurrock's version of the *tekoteko*. It also stressed that the submissions based on the sixpence and shilling coins 'illustrate the difficulties that would be involved in the use of the existing designs with decimal values'.⁶⁵ Though at pains to appear even-handed, the government had

⁵⁷ Searle, 'The Money in Our Pockets', as in n. 37, pp. 143–57.

⁵⁸ John Simpson interview, 29 November 1999.

⁵⁹ National Archives, Treasure Series 79 T10/32, Allan Sutherland to J.N.L. Searle, 7 January 1966.

⁶⁰ *New Zealand Herald*, 26 March 1966.

⁶¹ *Ibid.*, 30 March 1966.

⁶² *Auckland Star*, 30 March 1966.

⁶³ *Ibid.*

⁶⁴ PRO MINT 247/9. Prince Philip to Jack James, n.d. [May 1966].

⁶⁵ *Ibid.*, Alan Dowling, Draft memorandum to Royal Mint Advisory Committee, n.d. [April 1966].

submitted ten designs by Berry. Beadle was represented with his set of six, Mayo by five designs, Grey by four, Shurrock and Fraser by two and Gardner by one. In his briefing to committee members, Alan Dowling, head of the Royal Mint general section, told them: 'The New Zealand Government has expressed no preferences among the designs except in relation to those by Professor Beadle.' In Beadle's case, the designs were 'submitted at public request but they are not necessarily favoured by the New Zealand government'.⁶⁶ Although this was expressed cautiously, as a civil service euphemism its underlying meaning was unequivocal. Beadle had probably paid the price for his outspoken opposition to the original competition and for leaking his designs to the press without seeking prior clearance. The government also stipulated its wish to include at least one design related to Maori culture. This was consistent with the Treasury's original 'Notes for Guidance' to designers, which had recommended 'the inclusion of native or national emblems'. The national results of the polling were also forwarded to the Advisory Committee, citing public preference for four Berry designs, and one apiece for Beadle, Gardner and Shurrock.

The findings of the Advisory Committee were never made public. In his report to the New Zealand High Commission, Dowling noted: 'There remain considerable differences of opinion and although in respect of some denominations there is clear support for the designs preferred in New Zealand, in some others it is difficult to offer any clear-cut lead.'⁶⁷ While the Advisory Committee 'on the whole remained unenthusiastic' about what they saw, members agreed that 'many of the designs represented a marked improvement over the earlier selection and ... a tolerable coinage could result'.⁶⁸ The more conservative members – Prince Philip, Robin Mackworth-Young, the royal librarian, and James Woodford, the academic sculptor – in varying degrees gave Berry their preference. Prince Philip strongly favoured the choice of a single designer for the sake of visual consistency and commented somewhat lukewarmly of Berry's set: 'His designs are straightforward and look as if they would translate into coins quite well.'⁶⁹ His opinion was not shared by Kenneth Clark, who deplored Berry's 'faked' black skies and shaded backgrounds, likening them to 'the kind of ceramic ornaments that people hang on to their walls'.⁷⁰ John Betjeman agreed, commenting 'I should have thought Berry was the worst, with Fraser the next worse.'⁷¹ Most members preferred Berry's *tekoteko* design to Shurrock's, though four of them voted for Beadle's 50 cent Maori chief. Indeed, Clark and Betjeman, undeterred by the government's coded discouragement, both preferred Beadle's designs as a set, Betjeman commending them for their 'New Zealand look'. Gray's designs also received some support for their straightforward, uncluttered appearance, though surprisingly Fraser's received no votes. The Advisory Committee was split over its choice for the dollar coin. Gardner's heraldic design, (Pl. 22, 22) which had led the New Zealand polls, had some support, with Clark calling it a 'handsome coin', though the alternatives by Berry and Mayo were also admired. It is clear that Mayo's designs (Pls 22–4, 23–6) came as a revelation to the more artistically minded members of the Advisory Committee. Kenneth Clark described her 50 cent sheep-shearer and dollar punga-fern designs as 'outstandingly good' and regretted their incompatibility with the Beadle series. Betjeman agreed that Mayo's designs showed 'a certain charm' and Prince Philip believed they had 'some merit'.⁷² It is possible that Mayo was let down by her unfortunate 20-cent runners which, in her diary, she recognised was 'not a good design but want to show I can do figures (I can't really!)'.⁷³

Due to the committee's 'diversity of opinion', Dowling told Prince Philip that he believed 'no useful purpose would be served by further deliberation here' and proposed releasing a summary of

⁶⁶ Ibid., Alan Dowling, Memorandum to Royal Mint Advisory Committee, 21 April 1966.

⁶⁷ PRO MINT 20/3047, Alan Dowling to F. Calnan, 27 May 1966.

⁶⁸ Ibid., Alan Dowling to N.E.A. Moore, 29 June 1966.

⁶⁹ PRO MINT 247/9, Prince Philip to Jack Jones, n.d. [May 1966].

⁷⁰ Ibid., Kenneth Clark to Alan Dowling, 19 May 1966.

⁷¹ Ibid., John Betjeman to Alan Dowling, 26 April 1966. Betjeman then added 'No, on second thoughts I think Fraser is the worst of the lot.' He also disliked Beadle's 50 cent Maori chief design.

⁷² Ibid., Prince Philip to Jack Jones, n.d. [May 1966]. See also Kenneth Clark to Alan Dowling 19 May 1966 and John Betjeman to Alan Dowling, 26 April 1966.

⁷³ Eileen Mayo, Diary entry, 25 February 1966.

the Advisory Committee's findings, 'suitably modified to omit members' names. In spite of no clear-cut opinion it is after all for New Zealand to decide finally and there is nothing now that is intolerably bad.'⁷⁴ Notwithstanding Clark's strong personal misgivings over Berry's designs, this course of action was taken and the matter referred to the government.

In the meantime, the CDAC continued to convene in Wellington, but it was by this stage a spent force. In late May it proposed 'to submit a number of points, setting out the unreliable nature of public opinion polls' and stated that it was paying close attention to the Royal Mint Advisory Committee's comments.⁷⁵ Early in the following month, it produced two sets of recommendations. The majority, comprising MacLennan, McLintock, Simpson and Walker favoured designs by Gray and Fraser for the lower denominations (the Southern Cross, flax and geysers respectively) Shurrock's *tekoteko* for the 10 cent and Mayo for the higher denominations (her swordfish, shearer and punga-fern designs respectively). The two other members, Searle and Sutherland, recommended Berry as designer for all denominations except for the dollar, preferring Mayo's version for this. Simpson recalls his surprise and 'dismay' at Sutherland's support for Berry.⁷⁶ In retrospect, he attributes it to Sutherland's closeness to the political establishment in Wellington and to his frequent and friendly contacts with Berry through the Royal Numismatic Society of New Zealand.

The government took little over ten days to consider the views of the Royal Mint Advisory Committee and the CDAC. Searle telegraphed Ashley-Jones on 10 June to outline the situation. Shurrock's *tekoteko* was still being considered alongside Berry's, but the Mint's 'strong preference' for the latter proved decisive. Despite its overwhelming popularity in the newspaper poll, Berry's 20 cent kiwi design had received little Mint support, and the government was not quite ready to approve it. Searle noted, however, that 'comments from the Mint and by the public generally showed a set of designs by one designer was favoured and that there was a tendency to prefer Mr Berry's designs'.⁷⁷ On 14 June the government announced its decision. The minority report of the CDAC, supporting Berry's designs, was accepted; but Mayo's design for the commemorative dollar, favoured by the entire committee, was rejected in favour of Gardner's heraldic coin. (Pl. 24, 27) For the sake of stylistic consistency, Berry's tuatara design, which was less popular with the public than Beadle's, was adopted for the 5 cent coin.

The *Dominion* of that morning had it almost right, reporting that 'uncertainty surrounds the dollar coin' and reproducing Mayo's version as the more likely choice. Muldoon explained the reasons for Gardner's design taking preference: 'By preserving in our coins the New Zealand coat of arms which appeared on the half crown withdrawn in 1965 this commemorative dollar is a link with the designs of the coinage which is being replaced.'⁷⁸ This makes a telling contrast with Mayo's motive for depicting a punga-fern: 'What about a frond (or two) unfolding, to suggest a growing country with a future?'⁷⁹ Though inevitably disappointed that none of her designs were chosen, Mayo took the news phlegmatically and her admiration for Gardner's design was genuine. An entry in her diary of 23 June deserves quotation: 'read "Press" cutting (a fuss abt. choice of coins, 3 of mine were chosen) ... did some bra mending in the good, warm sitting room, in a contented frame of mind.'⁸⁰

'Contented' would be an apt description of the common reaction to the chosen designs. Surprisingly, no-one appears to have differentiated between the serviceable but unremarkable designs of Berry and the conspicuous dignity and elegance of Gardner's commemorative dollar. The popular verdict was one of relief, echoing the Royal Mint Advisory Committee's view of the coins representing a considerable improvement on their proposed predecessors. A Dannevirke housewife commented 'I haven't studied them, very nice'. Not everyone agreed. The sculptor,

⁷⁴ PRO MINT 20/3047, Alan Dowling to James Orr, n.d. [May 1966].

⁷⁵ National Archives, Treasury Series 79 T10/32. J.N.L. Searle to the Minister of Finance, 31 May 1966.

⁷⁶ John Simpson interview, 29 November 1999.

⁷⁷ PRO MINT 20/3047, J.N.L. Searle to Arthur Ashley-Jones, 10 June 1966.

⁷⁸ *Auckland Star*, 14 June 1966. See also *Dominion*, 14 June 1966.

⁷⁹ Eileen Mayo, Diary entry, 3 January 1966.

⁸⁰ *Ibid.*, 24 June 1966.

Greer Twiss, a colleague of Beadle's, later described the outcome as 'one of the calamities of New Zealand art politics'.⁸¹ The editorial in the *Christchurch Press* was somewhat kinder: 'Experts abroad may judge them to be pleasant but trite. Some may feel that this, after all, comes fairly close to expressing the New Zealand character.'⁸² The regional standpoints of newspapers were reflected in their editorials. The *Auckland Star* speculated: 'It would be interesting to know the Royal Mint's opinion of the set submitted by Professor Paul Beadle which some who have made a deeper study of art may feel was bolder and less old-fashioned in its choice and modelling of symbols'. The most it could say in Berry's favour was that his designs were 'neat and effective'.⁸³ The *Evening Post* was more favourable in its verdict, probably because Berry, a Londoner by origin, was a Wellingtonian by adoption. In its editorial, entitled 'Coins Of The People', it claimed of the designs: 'They are pleasingly New Zealand in their conception and have the added quality of being uniform in their theme ... Mr Berry put it simply yesterday: "I guess you could call this democracy at work in the coin designing world"'. It certainly refutes any idea that the public have no knowledge or ideas about art.'⁸⁴

Simpson continues to disagree with this last assertion. For him, *vox kiwi* was most certainly not *vox dei*, and he looks back upon his experience on the CDAC as a painful disappointment. Beadle, understandably, felt even more disenchanted; indeed, he told Gardner when the latter visited New Zealand in 1966–7 that at one point he had been close to suffering a nervous breakdown.⁸⁵ He was unable to offer Berry his congratulations, which Mayo had done. In retrospect, his experience, however disappointing, had a highly beneficial impact on his medal design, bringing about a liberating effect both on his imagination and on his technique. The elderly Shurrock never recovered from his rejection: 'frustration is a bitter pill & believe me I have had some', he commented.⁸⁶ Berry, naturally, felt differently. Declared '1966 Man of the Year' by the *Dominion Sunday Times*, and awarded the OBE in 1968, the adoption of his designs represented the climax of his career. The Royal Numismatic Society of New Zealand saluted his success as 'a fitting climax to his efforts and one of which the Society can take pride in its association'.⁸⁷ The Society went on to commission a commemorative decimal coinage medal, designed of course by Berry, and on Lady's Night in December 1966, he was presented with a mahogany rocking chair to mark his 'outstanding designs'.⁸⁸ Searle later wrote of Berry: 'To him the reward for his effort was not so much remuneration or the Queen's honour, but that his accepted designs finally reposed in the pockets and purses of New Zealand and Pacific Island people in the shape of millions of coins bearing the initials "JB"'.⁸⁹ On Berry's death in 1979, Muldoon paid warm tribute to his 'feeling for New Zealand flora, fauna and wild life ... reflected in his designs [which] gave the people of this country a complete sense of identification' with its decimal currency.⁹⁰ Muldoon himself fared equally well, being part of the winning team in the 1966 General Election and succeeding Harry Lake as Finance Minister following the latter's death in February 1967. On 10 July of that year, he took credit for supervising a triumphant transition to decimalisation with considerable – and largely unacknowledged – assistance from Searle. Muldoon later described the experience as fascinating and wearing, 'and throughout I knew that it was make or break as far as my political reputation was concerned'.⁹¹ For a few weeks in February and March 1966, following the leak of the first set of coinage designs, it looked like 'break', but by invoking 'democracy' the fortunes of this formidable New Zealand politician turned around.

⁸¹ Stocker, 'Pommie-Aussie-Kiwi', as in n. 15, p. 86.

⁸² *The Press*, 15 June 1966.

⁸³ *Auckland Star*, 15 June 1966.

⁸⁴ *Evening Post*, 15 June 1966.

⁸⁵ William Gardner, interview with the writer, 23 August 1996.

⁸⁶ Stocker, *Francis Shurrock*, p. 92.

⁸⁷ *New Zealand Numismatic Journal*, 11, 1966, p. 238.

⁸⁸ *Ibid.*, 12, 1968, p. 116. For the Decimal Coinage Medal, see *ibid.*, pp. 100–2.

⁸⁹ J.N.L. Searle, 'The Money in Our Pockets', as in n. 37, p. 157.

⁹⁰ Tye, *The Image Maker*, as in n. 37, p. 119.

⁹¹ Muldoon, *Rise and Fall*, as in n. 6, p. 75.

Key to Plates 15–24

1. New Zealand reverses: George Kruger Gray, half-crown, florin, shilling, sixpence and threepence, 1933; L.C. Mitchell, penny and halfpenny, 1940.
2. Paul Beadle, reverse designs, 1964. (Paul Beadle Archive, Auckland)
3. Milner Gray, 1 cent reverse design, 1964. (PRO)
4. Eric Fraser, 2 cent reverse design, 1964. (PRO)
5. Eric Fraser, 5 cent reverse design, 1964–5. (PRO)
6. Francis Shurrock, 10 cent reverse design, 1964–5. (PRO)
7. Francis Shurrock, 20 cent reverse design, 1964–5. (PRO)
8. Francis Shurrock, 50 cent reverse design, 1964–5. (PRO)
9. Coinage Design Advisory Committee, Amended version of Eric Fraser, 2 cent reverse design, 1965. (PRO)
10. Eric Fraser, revised 2 cent reverse design, 1965. (PRO)
11. A.H. McLintock, 5 cent reverse design, 1965. (PRO)
12. Francis Shurrock, original 10 cent reverse design, plaster, 275 × 150 mm. (University of Canterbury, Christchurch)
13. Gordon Minbinnick, *Tails You Lose!* (*New Zealand Herald*, 3 February 1966)
14. James Berry, 20 cent reverse design, 1964. (Joy Searle)
15. James Berry, 50 cent reverse design, 1966. (Joy Searle)
16. James Berry, *Self-Portrait*, obverse design for Société de la Sculpture de Médailles, 1971. (Joy Searle)
17. James Berry, 20 cent reverse design, 1964. (Joy Searle)
18. James Berry, 2 cent reverse design, 1964. (Joy Searle)
19. James Berry, 10 cent reverse design, 1964–6. (Joy Searle)
20. James Berry, 5 cent reverse design, 1964–6. (Joy Searle)
21. James Berry, 2 cent reverse design, 1964–6. (Joy Searle)
22. William Gardner, Commemorative dollar reverse design, 1964. (PRO)
23. Eileen Mayo, Commemorative dollar reverse design, 1966. (PRO)
24. Eileen Mayo, 50 cent reverse design, 1966. (PRO)
25. Eileen Mayo, 20 cent reverse design, 1966. (PRO)
26. Eileen Mayo, 20 cent reverse design, 1966. (PRO)
27. New Zealand reverses: William Gardner, Commemorative dollar, 1967; James Berry, 50 cent, 20 cent, 10 cent, 5 cent, 2 cent, 1 cent, 1967.



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11

A FEW HELPFUL THOUGHTS ON THE NEW COIN DESIGNS, OR, LET'S GET IN FIRST!



SUGGESTED IMPROVEMENT
TO HORSE DESIGN



FOOTBALL, BY ALL MEANS,
- BUT 20 IS A SCORE



AS A CHANGE FROM THE
MAORI MOTIF, HOW ABOUT THE
FAMILY CAR AND BOAT LEADING
THE QUEUE?



FINE DAY AT MILFORD
(DRAWN FROM LIFE)



FLAX? WHY NOT HOPS?



NEW VISUAL MATHEMATICS
TO CONFUSE THE CHILDREN,
OR, $4 = 1$

13



12



14



15



16

STOCKER: DECIMAL COIN REVERSES (7)



17



18



19



20



21



22



23



24



25



26



27

SHORT ARTICLES AND NOTES

A HOARD OF IRON AGE COINS FROM NEAR WOODBRIDGE, SUFFOLK

PHILIP DE JERSEY AND JOHN NEWMAN

In December 1996 an Iron Age gold stater was discovered during metal detecting in a field in the Deben valley, near Woodbridge in Suffolk. Further intensive searches of the site over the next two years recovered a total of eighteen coins. In 1999 mechanical scraping of the topsoil to expose the subsoil was combined with an intensive metal detector search but this failed to recover any more coins or locate a concentrated source. This indicates that agricultural disturbance has scattered the complete hoard, and that the vast majority of the deposit has now been recovered.

The hoard, which consists primarily of the coins known as British G, or Clacton staters and quarter staters, was probably deposited during the later stages of the Gallic War, or shortly thereafter. Apart from its intrinsic interest, publication provides an excellent opportunity for a brief review of the distribution of the Clacton types.¹

I. The hoard

The majority of the coins were scattered over an area of approximately 50 × 60 m, with one outlying coin (no. 3) found some 120 m south-east of the main concentration. The findspot lies near the 20 m contour, just above a small inlet which in the late Iron Age could have formed a landing place for sea or river traffic, and is approximately 1500 m east of the tidal River Deben. Due to the free-draining nature of the local sand and gravel deposits the lower Deben valley is responsive to cropmark formation, and the field in which the coins were found was already recorded on the County Sites and Monuments Record as displaying evidence of field boundaries and droeways of unknown date. The coins were found close to a point where one of these droeways splits to form two tracks.

Fieldwalking and intensive metal detector survey in the area around the findspot of the coins has revealed evidence of probable settlement activity dating from the mid first millennium BC through to the period of the Roman conquest, with activity continuing in the general area evidenced by the discovery of Roman coinage of the first, second and third centuries AD, and by first and second century brooches, including a rare silver type. Several other Iron Age coins are recorded from the site which

apparently have no association with the hoard: an uninscribed north Thames bronze unit (CCI 96.2891), a bronze unit of Cunobelin (VA 2107, CCI 96.2964), a worn silver unit of Addedomaros (CCI 97.1407), and a fragment of a Corieltauvian silver unit (CCI 98.2060).

Details of the eighteen Iron Age coins (Pl. 25) forming all or part of the hoard are presented in the accompanying table. The composition of the hoard bears a significant degree of resemblance to the Clacton, Essex (1898) deposit. Apart from the 'new' type of quarter stater (BMC 192), which did not occur in the Clacton hoard, all the dies of the British coins amongst this group are represented in the older hoard. The dies for the four coins of BMC 192 type are also duplicated outside the hoard. The single Gallo-Belgic E stater, part of the massive issue of uniface coins conventionally dated to the Gallic War, does not appear to have any reverse die-links to other coins from Britain recorded in the Celtic Coin Index, but is matched by a stater apparently found at Mons in Belgium in 1901.²

The new quarter stater has been discussed in some detail elsewhere,³ and has more recently appeared in the catalogue of the British Museum collection.⁴ The reverse is very plainly a reduction in size of the design on the reverse of the stater, while the obverse appears to be derived from the 'three men in a boat' design on the Gallo-Belgic D quarter stater (VA 69-1), and thus joins an extensive list of insular derivatives of that Gallo-Belgic coinage. Stylistically it lies much closer to the British G stater than the old quarter stater (VA 1460), which although also deriving its obverse from Gallo-Belgic D, has a simpler reverse design based on a cross with pellets in each quarter.

The average weights of the two types of quarter stater – 1.42 g for 15 examples of VA 1460, and 1.30 g for 36 examples of BMC 192 – suggest that the old type (VA 1460) is likely to be the earlier of the two. No analyses have yet been performed on the BMC 192 type to establish whether its alloy is significantly more base, but it is worth noting that many examples are distinctly coppery in tone, while others have been recorded as base gold; these terms have not been applied to examples of the VA 1460 type.

¹ The authors are grateful to the two metal detectorists who discovered the coins and made meticulous records of their location, and to the landowner, who willingly facilitated successive searches of the site. Following the requisite procedures of a Treasure Trove inquest (for the five coins recovered before September 1997) and a Treasure Act decision for the remainder, two of the quarter staters (nos 15 and 16) have been retained by the British Museum, and the remainder of the coins returned to the landowner.

² Cabinet des Médailles, Brussels, II 23.171 (CCI 98.1781).

³ P. de Jersey, 'A new quarter stater for British G?' *Spink Numismatic Circular* 101, 236–7.

⁴ R. Hobbs, *British Iron Age coins in the British Museum* (London, 1996), p. 55, where it is erroneously placed with the north-east coast staters (British H).

The condition of the coins in both the Clacton and near Woodbridge hoards is much the same, and it is reasonable to assume that both hoards were deposited at a similar

period, perhaps during the Gallic War or in the decade or two thereafter.

TABLE 1: Coins in the 'near Woodbridge' hoard.

no.	CCI	type	ref.	weight (g)	comments
1	97.0052	G-B E	VA 52	6.19	Scheers series 24, class II
2	97.0053	British G	VA 1455	6.21	dies as no. 4, BMC 152-5
3	97.1089	British G	VA 1455	5.91	obv. die as nos 5, 9, 10; dies as BMC 178
4	98.0685	British G	VA 1455	6.24	dies as no. 2, BMC 152-5
5	98.0686	British G	VA 1455	6.09	obv. die as nos 3, 9, 10; rev. die as no. 10; dies as BMC 179
6	98.0687	British G	VA 1455	6.15	dies as no. 11, BMC 164-5
7	98.0688	British G	VA 1455	6.16	dies as BMC 175-176
8	98.0689	British G	VA 1455	6.34	obv. die as nos 6, 11; dies as BMC 167
9	98.0690	British G	VA 1455	6.43	obv. die as nos 3, 5, 10; dies as BMC 173
10	98.0691	British G	VA 1455	6.06	obv. die as nos 3, 5, 9; rev. die as no. 5; dies as BMC 179
11	98.0692	British G	VA 1455	6.07	dies as no. 6, BMC 164-5
12	98.0693	British G	VA 1455	3.54	fragment; obv. die probably as BMC 168
13	98.0694	British G	VA 1455	1.05	fragment; obv. die probably as BMC 168
14	97.0054	British G	VA 1460	1.51	dies as BMC 180-1
15	97.0055	British G	BMC 192	1.47	obv. die as BMC 192; rev. die as coin from SW Norfolk hoard (CCI 98.1114)
16	98.0696	British G	BMC 192	1.42	dies as BMC 192
17	98.1115	British G	BMC 192	1.29	obv. die as BMC 192; rev. die as Vecchi 12.9.1996, lot 1084 (CCI 96.3125)
18	98.1116	British G	BMC 192	1.27	obv. die as coin in private coll. (CCI 98.1091); rev. die as Rudd 1992 list 2, no. 19 (CCI 94.1397)

II. The distribution of British G

Until the advent of metal-detecting, the stater and quarter stater which Allen identified as British G were known only from the Clacton hoard, or from coins which though without provenance had almost certainly originated in that hoard.⁵ Despite intense metal-detecting activity since the mid-1970s, the number of findspots for the stater is still relatively low, but the same period has seen the discovery of almost fifty examples of the new quarter stater, and a trebling in the number of known examples of the old Clacton quarter stater.

With the increase in recorded numbers of all of these types it is possible for the first time to produce a useful distribution map (Fig. 1).⁶ The coins are found predominantly in the territory of the Trinovantes, with a couple of outliers to the west amongst the Catuvellauni, and a few more in the Iceni territory to the north. Despite the problems of applying tribal divisions only formalized in

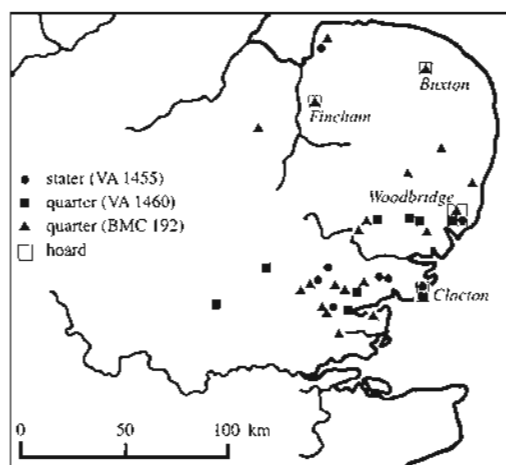
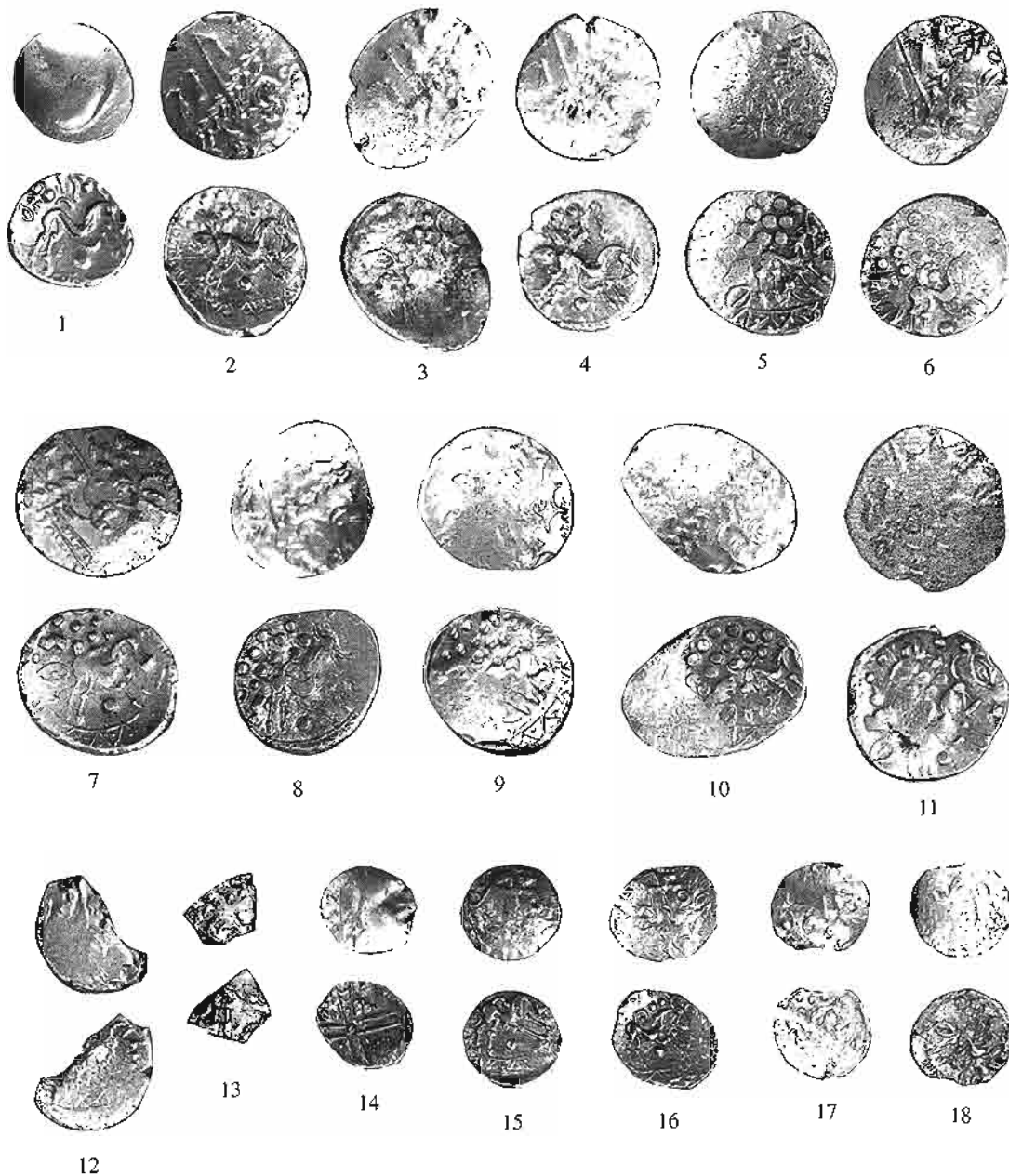


Fig. 1.

⁵ D.F. Allen, 'The origins of coinage in Britain: a reappraisal', in S.S. Frere (ed.), *Problems of the Iron Age in southern Britain* (University of London, 1960), p. 179.

⁶ Two coins are not plotted on the map: one example each of the stater and the VA 1460 quarter stater, found near Caistor in Lincolnshire.

⁷ R.D. Van Arsdell, *Celtic Coinage of Britain* (London, 1989), pp. 319-21.



the early Roman period to earlier patterns of distribution, an attribution to the Trinovantes seems very likely. The clear concentration in their territory makes a nonsense of recent claims that the two north Thames tribes 'cannot be distinguished numismatically',⁷ for this period at least; and it is likely that as findspots of other north Thames types increase they too will often enable us to disentangle the Trinovantes and the Catuvellauni.

There is little in the distribution to suggest that the VA 1460 quarter stater type necessarily had a different origin to the stater and its stylistically closer quarter stater (BMC 192). Although the two findspots in Catuvellaunian territory are both VA 1460 types, a further five single finds of this type, and the Clacton and near Woodbridge hoards, are firmly within Trinovantian territory. It is perhaps most likely to be an earlier production of the same authority, but an alternative source cannot be ruled out.

The BMC 192 quarter type has turned up in two Norfolk hoards, which provide some contextual information additional to that from the near Woodbridge hoard. In south-west Norfolk, a single rather worn example has been found in a hoard of just over 200 coins, predominantly composed of a wide range of Icenian silver.⁸ It adds little to our information on this type, however, given that the hoard almost certainly cannot have been deposited before the middle third of the first century AD.

At Buxton with Lammas, in the north-east of the county, another worn quarter stater accompanied sixteen Gallo-Belgic E staters.⁹ This hoard is likely to have been deposited at a similar period to the Clacton and near Woodbridge finds, but again it contributes relatively little to our understanding of British G.

Possibly the most curious aspect of the BMC 192 quarter type is its absence from the Clacton hoard. Of course we do not necessarily need to search for a logical reason for this absence, but it seems odd that this type – now three times as common as the VA 1460 quarter, though discovered only in the last twenty years – did not occur alongside the British G staters in that hoard. Leaving aside the possibility that the hoard was not fully recovered, one possible explanation is that this type was deliberately omitted on account of its relatively base metal. Another explanation might be a significant chronological disparity between the stater and the BMC 192 quarter, but this is difficult to reconcile with their typological similarity, and besides the condition of the staters in the Clacton hoard does not suggest that they were deposited very soon after their production. Perhaps this search for a 'meaningful' explanation is ultimately pointless: whoever buried the Clacton hoard may simply not have possessed any of these quarter staters, for whatever reason, and there the matter lies.

ALDATES, GADUTELS AND BADIGILS: IDENTIFICATION OF MONEYERS IN THE NORTHUMBRIAN COINAGE.

VERONICA SMART

At first sight the Northumbrian styca issues are a simple coinage, though further investigation gives this the lie. Most of the personal names, however, are easy enough to read and identify. They are composed of elements well attested in Old English naming of this period. In general the spelling conforms very closely with contemporary Northumbrian orthography, as it is demonstrated in the ninth century entries in the commemoration lists now known as the Durham Liber Vitae.¹ The epigraphy is more eclectic, often mixing runic with roman letters, and there are some unusual letter forms, but this has not in the main thrown up many problems.

Two names, however, have proved obscure. One is usually rendered as ALDATES, the other GADUTELS.² *Gadutels* makes no sense as a personal name, corresponding neither whole nor in its parts to any known word in the Old English lexicon nor in items used as name elements. *Aldates* has some claim to onomastic respectability, by association with the street-name in Oxford, though no Saint Aldate is known to the Christian calendar.

Margaret Gelling, in the English Place-Name Society's

Oxfordshire volume, comments that one other instance of this apparent dedication is known in Gloucester, where St Aldates stands by what was the old North Gate of the city. The street now known as St Aldates in Oxford was formerly also known as Old South Gate, and it is possible that in both cases Old Gate has become corrupted and assumed to be the name of a saint. St Aldates is also recorded earlier as St Olds. The name on the coins looks as if it might contain the element *Ald-*, the Anglian, and therefore Northumbrian reflex of West Saxon *Eald-*, but it is difficult to make out a satisfactory case for the second element, even as a genitive form, which would be unique in this series. A candidate might be OE *-geat*, found in such names as *Ælfgeat*, *Wulfgeat*, but the change of diphthong and reduction of the consonant to *-at* would be irregular at any period of Old English, and even more anachronistic in the ninth century.

As long ago as 1956 Stewart Lyon suggested in a table of styca hoards published in *BNJ*,³ that disparate as these legends might seem, they might be forms of the same name. They show similarities in letter-forms, particularly

⁸ Contents summarized in the *Numismatic Chronicle* 159 (1999), p. 340.

⁹ Contents summarized in *Britannia* 24 (1993), p. 301, and *Britannia* 25 (1994), p. 278.

¹ Edited by H. Sweet in *The Oldest English Texts* (Early English Text Society 83) (Oxford, 1885); see also H. Müller, *Über die Namen des Northumbrischen Liber Vitae* (Paderborn 9) (Berlin, 1901).

² On coins of Eanred. For examples and photographs see *SCBI* volumes, indexed in vols 28 and 41 under Aldates and Gadutels. The drawings below are taken from John Adamson's plates in his publication of the Hexham hoard, *Archaeologia* XXV, 1833.

³ 'A reappraisal of the sceatta and styca coinages of Northumbria', *BNJ* 28 (1956), 241.

in the T, $\bar{\text{T}}$ used in both names. Lyon further suggested that they might be identified with coins in the name of 'Thadigils', but concluded 'the correct form is uncertain'. In her analysis of the Adamson plates of the Hexham hoard,⁴ Elizabeth Okasha also pointed to the possible conflation of *Aldates* and *Gadutels* and queried the conventional transcription of the initial letter as G, preferring to read it as *Ladutes*. Most recently, in the *Sylloge* volume for Northern Museums,⁵ James Booth takes up Pirie's suggestion and transcribes the name as LADVCEIS with the 'celtic' curled T. Booth and Pirie both accept *Aldates* as the more correct form and *Gadutels* etc. as the corruption, but it is clear from these observations that the transcription of these groups of letters is in some doubt, and other interpretations could be permissible.

I would differ from taking *Aldates* as the lemma, by taking 'GADVTEIS' or 'LADVCEIS' as my starting-point, and looking at the disputed initial. Although the epigraphic font available to the *SCBI* volumes is useful, it cannot pick up every nuance, and its rectilinear L does not accurately render the pothook letter L 6. This is not the L used elsewhere in the names ODILO and FOLCNOÐ, where the letter L is known to be appropriate. There is no upper cap to the letter, which would favour L rather than G, and in some cases the foot curves back to the vertical. This is illustrated most clearly in the first of the illustrations below.

Elizabeth Okasha has produced a very valuable table of letter-forms found on Anglo-Saxon inscribed objects, (not including coins)⁶ and the closest parallel I find there for this letter is neither L nor G but B, or rather b, as in Okasha's B3. This, essentially a lower-case b not completely closed, occurs in some otherwise upper-case inscriptions, notably Wensley II, Whitby DCCXXXII and Lindisfarne III. These inscriptions are dated to the eighth or ninth centuries. Searching for this b form on coins, I have found it on the moneyer Cuthberht's coins for Offa (Blunt 24)⁷ – there may be other instances, but there is no register for coin lettering comparable to Okasha's. The distribution of the inscriptions establishes its use in Northumbrian epigraphy, but the Offa coin suggests it was by no means confined to there.

So far we would have bADVCEIS. The next hurdle is the so-called T. Again, this is not the T which is used in other moneyer's names, for example þIHTRÆD, in this series. On the other hand, it is very similar to the symbol used to represent G in the legends of the moneyer Leofthegn $\bar{\text{T}}$, $\bar{\text{T}}$, $\bar{\text{T}}$ who strikes coins for Æthelred II of Northumbria.⁸ On many of the latter's coins the stem is more elaborately

curved and on some reversed, but it seems quite possible that the 'Gadu-/Ladutels' die-cutter is attempting this letter. It is true that the curved Celtic or Lombardic $\bar{\text{T}}$ occurs in Okasha's alphabet three times (Brussels, Crowl and Ruthwell) as a capital T, but it also resembles a G form, her G3 $\bar{\text{T}}$. The fact that Lyon was equating these names with a third 'name' *Thadigils*, suggests that he was already accepting the symbol as a possible representation of G.

Aldates would now appear in the new transcription as bADVGEIS, or bADVGEIS, reading the second A as inverted V – i.e. bADV by transposition, + GES. It is noteworthy that this letter, which I propose as an inverted V, is never barred, whereas the A in BADA is invariably barred either medially or above.

If we accept the debatable letters as B and G respectively, we can begin to make sense of the name. Reading it now as bADAGELS or bADAGEIS, it is not a great leap to the name of a moneyer we know already for Eanred's reign, namely bADIGILS. In fact, as I pointed out in my earlier paper on the 'styca' moneyers, a form in *Badu-* would be etymologically more correct than the *Badi-* we know already.⁹ The root is a primitive Germanic *Badu-*, reflected in the non-Anglian poetic *beadu-*, 'battle' and Anglian, therefore Northumbrian, *Badu-*. The Durham Liber Vitae has both forms *Badigils* and *Beadugils*. The variation in the composition joint is no doubt due to the weakening of the unstressed vowel in this position in pronunciation, and a mistaken replacement, probably by analogy with names in *Sigi-*, *Wini-*, with *i*.

There is a problem with the second element, in that *-gels*, *-geis* for *-gils* is irregular. *e* for *i* cannot be explained as a phonological variation but seems too consistent for a die-cutting error. This second element is from *gisel-*, a theme with a complicated semantic history in common Germanic,¹⁰ where it seems to have developed from 'shoot, sprig' to 'noble offspring' to the specialised meaning 'hostage', which meaning it has in OE as a common noun. In names it appears in first position as *Gisl-*, as in *Gislheard*; *Gislhere* (though the other instances cited by Searle are very doubtfully English). As a second element it occurs only in the metathesised form *-gils*, as in the moneyer's name. It is not a very prolific element in Old English names and does not seem to survive beyond the ninth century. It is possible that the die-cutter had in mind the *-gisel* form when he cut E in this element. Otherwise the variation in vowel might be explained as a reduction in the definite quality of the vowel owing to its unstressed position.



⁴ In *Coinage in Ninth Century Northumbria*, D.M. Metcalf (ed.), BAR British series 180 (1987), p. 261.

⁵ *SCBI* 48.

⁶ 'The non-runic scripts of Anglo-Saxon inscriptions', *Transactions of the Cambridge Bibliographical Society* iv (1968), 322–30.

⁷ C.E. Blunt 'The coinage of Offa' in *Anglo-Saxon Coins*, R.H.M. Dolley (ed.) (London, 1961), plate IV no. 24.

⁸ See especially *SCBI* 2, 211–15.

⁹ 'The personal names of the pre-Viking Northumbrian coinages' in *Coinage in Ninth Century Northumbria*, as in n. 4, p. 247.

¹⁰ E. Förstemann, *Alteutsches Namenbuch* (Hildesheim, 1966 reprint), cols 647–8; H. Kaufmann, *Ergänzungsband zu Förstemann Personennamen* (Hildesheim, 1968), pp. 147–9.

Thadigils, i.e. ÐADIGILS should surely be more correctly transcribed as *Badigils*. In the BMC illustration the horizontal divides the D but does not cut through the stem and project left of it. It should be remembered that crossed D for the <th> sound is by no means to be accepted without question in the styca series. On the coins, it has been a matter of note that <th> is invariably represented in the older style by D, as in FORDRED, LEODFEGN, BRODER. This is the usual symbol in the OE names in the earliest MSS of Bede, i.e. Moore and Leningrad,¹¹ but LVD has begun to introduce ð along with d, t, and th.¹² On the coins crossed D is only found erroneously in HERREÐ, which is

properly a *-red* name. This suggests that the die-cutters may have been aware of the innovatory symbol but were uncertain how it should be used.

It is not unlikely that the die-cutter who cut the 'Aldates/Gadutels' dies, with the distinctive b initial and badu- form, was a different man from the Badigils die-cutter. Nevertheless, given the rarity of the name, I would contend that these dies all render the name of the same moneyer, who might now be cited by standard OE lemma *Beadugils*, or in the Northumbrian context *Badugils*, and that Aldates and Gadutels should be forgotten.

METHELTUN NOT MEDESHAMSTEDE: AN ANGLO-SAXON MINT AT MELTON MOWBRAY RATHER THAN PETERBOROUGH ABBEY

MARK BLACKBURN

In 1954 Michael Dolley published a fragmentary coin of Æthelred II's First Hand type from the Swedish Barshage, Gotland hoard with a reverse legend: +HILDE M-O MEÐ [] (Pl. 26a, 2).¹ He persuasively argued that this was a coin of *Medeshamstede* (as Peterborough was called until the late tenth century), and reflected the exercise of minting rights which the abbot was reputed to have enjoyed since 972, through a moneyer either at Peterborough itself or at nearby Stamford. The case was strong, for the moneyer Hilde – a very unusual name – had struck coins at Stamford in the preceding type, and the spelling of the place-name *Med...* rather than *Med...* could arguably be explained by a recognized softening of the sound in the Danelaw. A potential problem was that a mid-nineteenth-century account of the hoard from Quendale, Shetland mentioned a coin of Æthelred II of unspecified type, said to read +PIZTAN MO MEÐEL.² The whereabouts of the coin was unknown, but Dolley argued that since the moneyer's name looks improbable and arguably misread,³ there may also have been an error in transcribing the mint-name. He proposed that the missing coin perhaps read +PVLZTAN (or PLZTAN) M-O MEÐEZ. The coin has still not surfaced, and while Dolley may well be correct in identifying the moneyer as Wulstan, who was active at Stamford in this period, his correction of the mint name

now seems unjustified. A third coin of the mint was identified by Van der Meer in the Berlin collection (Pl. 26a, 3).⁴ It is of Cnut's Quatrefoil type reading +LEOFD/ÆI MO MEÐ. The dies are of Lincoln style, and the moneyer's name is again a rare one which only otherwise occurs on Anglo-Saxon coins of Stamford, first in Æthelred II's First Hand type and then, representing a second individual, in Cnut's Short Cross and Harold I's Jewel Cross types.

A second example of the First Hand coin of Hilde (Pl. 26a, 1), struck from the same dies as the Stockholm specimen, was found in 1999 by Mr A. Steele using a metal detector on farm land at Easton, Hants.⁵ Fortunately, it enables the inscriptions to be read in full:

Obv. +ÆÐELREDRED REX ANGO
Rev. +HILDE M-O MEÐELTV

It weighs 1.14 g, with a small chip missing and having been broken and repaired, which suggests the metal has corroded, so that the original weight could well have been somewhat higher. It has been acquired by the Fitzwilliam Museum, Cambridge.⁶

Before considering the form of the mint name on the new coin, we should see what can be discerned about its origin from the style of die-cutting. Our knowledge of the die-cutting styles of the First Hand issue is still relatively

¹¹ H. Ström, *Old English Personal Names in Bede's History* (Lund studies in English) (Lund, 1939).

¹² See note 1.

¹ R.H.M. Dolley, 'A new Anglo-Saxon mint—Medeshamstede', *BNJ* 27 (1954), 263–5.

² Exhibit by Mr Webster, *NC* 13 (1849–50), Proceedings pp. 6–7.

³ Stewart Lyon has drawn my attention to a coin of Edgar's Circumscription Cross type reading +PIZTAN MONETAH, in his own collection. Although this is arguably of the Southampton mint, it shows that the moneyer's name is no longer 'without parallel and philologically objectionable', as Dolley had suggested.

⁴ *SCBI* Berlin 650. The coin was first identified in Gay Van der Meer, 'Some unpublished Anglo-Saxon coins in the Berlin coin cabinet', *Dona Numismatica*, edited by P. Berghaus and G. Harz (Hamburg, 1965), pp. 67–71, at pp. 70–1.

⁵ First published in G.T. Dunger, 'A First Hand type penny of Aethelred II from the Abbey mint of Medehamstede, Peterborough' *NCirc* 107 (1999), 209.

⁶ CM.428-1999. Purchased with the aid of a matching grant from the MGC/V&A Purchase Grant Fund. I am grateful to Dr Gerald Dunger, numismatic advisor to the Hampshire Detector Club, and to the finder and landowner, Mr A. Steele and Mr R. Burge, for offering the coin to the Fitzwilliam.

weak, for although the basic divisions were identified by Dolley and Talvio,⁷ their study was based on a limited sample and is poorly illustrated. The dies for the coins of Hilde appear to be in a style associated with the Midlands.⁸ Notable features of the obverse are the almond-shaped and pelleted eye and the form of drapery and hair, while the reverse has a carefully delineated hand with a small guiding pellet in the centre, a pellet within the two arcs representing the sky, a distinctive letter M formed with a central 'v' and a pelleted O. These features are most closely paralleled on coins of Derby (*SCBI* Midlands 182) and Tamworth (*SCBI* Midlands 190), but some of them are also evident at Leicester (*SCBI* Berlin 204) and Stamford (*SCBI* Lincolnshire 111, 118). On stylistic grounds, then, an attribution to Peterborough is unobjectionable.

The new coin, however, in allowing us to complete the reverse inscription, shows clearly and unambiguously that the mint-name is not *Medeshamstede*, as Dolley had supposed, but *Medeltun*. This is a linguistic hybrid, combining Old Norse *medal* ('middle', with weakening of the unstressed *a*), and Old English *tun* ('village' or 'settlement').⁹ Such a form is usually interpreted as reflecting Scandinavian influence on a pre-existing OE place-name *Middeltun*, but it could indeed be a new tenth-century name displaying cross-influence through either Anglo-Scandinavian people adopting OE *tun* or Anglo-Saxons adopting ON *medal*.

We are looking, then, for somewhere known by the tenth century as *Medeltun* or *Middeltun*, a common enough place-name which could have developed, according to local dialects, into modern Middleton, Malton, Melton, Milton, etc. Curiously, nowhere with such a name has been identified as having had the attributes of a borough in the Middle Ages¹⁰ – the normal status of a mint place.¹¹ We need to cast around among possible contenders to find the most likely location. The use of Midlands and Lincoln style dies and the sharing of moneyers with Stamford help us to narrow the search. Melton Ross in Lincolnshire has yielded finds of Anglo-Saxon coins and artefacts, but it is at the northern end of the Wolds, some 75 miles from Stamford. Norfolk has Melton Constable, north west of Norwich, and Great and Little Melton, west of Norwich, also each some 75 miles from Stamford. Rather closer would be Milton Malsor, near Northampton, or Middleton, near Corby, also in Northants. But none of these settlements appears to have enjoyed the status of a regional centre. The Norfolk Meltons can also safely be ruled out on stylistic grounds,

for the East Anglian mints in First Hand consistently use dies in the distinctive East Anglian style, which the *Medeltun* coins are not.

The most plausible candidate is also well situated, only some 20 miles from Stamford. Melton Mowbray, Leics., is not mentioned in any pre-Conquest sources,¹² yet it is clear from the references to it in Domesday Book that it was a place of considerable significance in the Anglo-Saxon period.¹³ It was the centre of one of the four soke of Leicestershire, and had a series of estates in the region that were dependent upon it.¹⁴ Although the soke of Melton was owned privately by Leofric, son of Leofwine, in 1066, earlier it may well have been a royal estate as most soke centres were. The church had two priests, and its parish was one of the largest in the county, suggesting it had been an early minster.

Melton Mowbray is the only place in Leicestershire or neighbouring Rutland that is specifically mentioned as having a market, and this returned the considerable sum of 20 sh. annually to the lord. There were, no doubt, other places with markets in the county, for the Domesday entries for Leicestershire are notably concise and inconsistent, but still the size of Melton Mowbray's market and the fact that it was singled out for mention reinforces the town's status as a significant regional centre. In a study of the development of towns, Everitt cites Melton Mowbray as one of ten examples in England of what he calls 'primary towns', that is medieval towns whose significance ante-dates the Norman Conquest.¹⁵ Yet for all that, Melton Mowbray never seems to have gained burghal status, or if it did in the tenth century, this was not maintained. Melton Mowbray would not be the only late Saxon mint that failed subsequently to be recognised as a borough, for the same applies to Crewkerne, Horncastle, Horndon, and Lymne, as well as the temporary hill-top mints of Cadbury and Cissbury.

Where does this leave the mint of Peterborough and the minting rights of the abbey? These have probably been discussed more extensively than those of any other mint, for there is good documentary evidence indicating that, at least in the early twelfth century, the abbot had minting rights in Stamford and perhaps in Peterborough itself.¹⁶ These rights may date back to the tenth century, although the charter of King Edgar of 972, which grants the Abbey various rights including 'a moneyer in Stamford', is a twelfth-century fabrication¹⁷ and we cannot be sure how accurately it reflected the original grant which had probably been destroyed in the fires of 1070 or 1116. Unfortunately, the removal of the *Med* coins from

⁷ M. Dolley and T. Talvio, 'The regional pattern of die-cutting exhibited by the First Hand pennies of Æthelræd II preserved in the British Museum', *BNJ* 47 (1977), 53–65.

⁸ I am grateful to Stewart Lyon for sharing his thoughts on the stylistic features of these coins and discussing the attribution generally.

⁹ I am grateful to Dr David Parsons for his guidance on the linguistic features of this name.

¹⁰ M.W. Beresford and H.P.R. Finberg, *The Medieval English Boroughs: A Handlist* (Newton Abbot, 1973).

¹¹ H.R. Loyn, 'Boroughs and mints AD 900–1066', *Anglo-Saxon Coins*, edited by R.H.M. Dolley (London, 1961), pp. 122–35 (reprinted in H. Loyn, *Society and Peoples. Studies in the History of England and Wales, c.600–1200* (London, 1992), pp. 90–110).

¹² There also seems to be little in the way of archaeological remains, apart from two Pagan Saxon cemeteries; A. Meaney, *A Gazetteer of Early Anglo-Saxon Burial Sites* (1964), p. 147.

¹³ In Domesday Book the place-name is *Medeltone*. Mowbray is a thirteenth-century addition.

¹⁴ C. Phythian-Adams, *The Norman Conquest of Leicestershire and Rutland. A Regional Introduction to Domesday Book* (Leicester, 1986), pp. 10, 18.

¹⁵ A. Everitt, 'The primary towns of England', *Local Historian* 11.5 (1975), 263–77, at 266–7.

¹⁶ W.C. Wells, 'The Stamford and Peterborough mints. Part I', *BNJ* 22 (1934–5), 35–77, at 49–77.

¹⁷ P. Sawyc, *Anglo-Saxon Charters: An Annotated List and Bibliography* (London, 1968), no. 787; and the revised web version: www.trin.cam.ac.uk/chartwww/

Peterborough now leaves the attribution of any particular coins to the Abbey rather insecure.

In the Norman period a few coins have tentatively been attributed to Peterborough, by then renamed *Burg*. The problem has been distinguishing them from coins of the well-attested mint of Barnstaple (*B(e)ardastapol*), since on Norman coins As and Vs are easily confused as they are both often represented by two uprights (II). Two coins of William I's type 2 of the moneyer Leofwine have the mint-signatures BVR and BIIRI,¹⁸ and the clear V on the former is persuasive evidence in favour of a Peterborough attribution.¹⁹ However, a coin now in the Conte collection of William I's type 7 by the same moneyer reads BIIRD,²⁰ which is a typical mint-signature for Barnstaple but would require special pleading to be understood as standing for *Burg* or *Burh*.²¹ Stewart draws attention to the fact that Leofwine was a moneyer at Stamford in William I's reign, though not known for types 2 and 7 when he may have transferred to Peterborough. But the name is a common one, and a Leofwine was also operating in William's reign at Exeter, the mint most closely associated with Barnstaple. In Henry I's type 2 there are two coins of a moneyer Edword with a mint-signature BIIR,²² and the inclination has been to attribute these to Barnstaple, though Peterborough would also be a possibility. Finally, a coin of Stephen's type 7 appears to read JONBVR,²³ and although the last letter is a little unclear, it is more likely to be an R than a square C indicating BVC for Buckingham, a mint now attested in this type by a coin in the Conte collection. In summary, there are several Norman coins for which an attribution to Peterborough can be argued, but decisive evidence is unfortunately lacking.

A number of scholars have interpreted the addition of an annulet to the normal designs on coins of Stamford as signifying that they were struck for the abbot.²⁴ This principally occurs on a group of coins of Edward the Martyr

and Æthelred II's First Small Cross type. The argument had been bolstered since 1954 by the attribution of the *Med* coins to Peterborough, but as Jonsson has pointed out the pattern of annulet-marked coins at Stamford is to say the least surprising.²⁵ Under Edward the Martyr three of the twenty-three known dies have an annulet or erased annulet, while in Æthelred's First Small Cross seven of the thirteen dies had been so marked involving five of the eight moneyers. From the following 180 years of minting at Stamford there are only a tiny number of coins with an annulet in the design – just an odd specimen of Æthelred's Long Cross type and Henry I's type 14. If the annulet signified minting for the abbot there must have been some very exceptional situation in c.978 that involved his briefly dominating Stamford's production. However, the association of the annulet with abbatial or ecclesiastical minting is purely a hypothesis, though one that has gained credence by being applied in different periods.²⁶ The most influential case has been the Fox brothers' identification of London coins of Edward I's class Id with an annulet on the breast as struck on behalf of the abbot of Reading, but this is doubtful since the Abbey's minting rights seem to have been suspended at this time.²⁷ Annulets are just one of several marks that appear from time to time on late Anglo-Saxon coins and which were evidently intended to distinguish the dies for some administrative purpose, and the Stamford annulets may well fall into the same category.²⁸ Indeed, there is no reason why coins struck at Stamford for the profit of the abbot of Peterborough should have been specially marked in any way. After all, the archbishops of Canterbury had stopped issuing distinctive coins in 923. Without denying that the abbots of Peterborough may well have taken fees from one or more moneyers at Stamford throughout the late Anglo-Saxon and Norman periods, we should admit that without knowing the identity of these moneyers we probably cannot recognise the abbots' coins there today.

¹⁸ BMC 74 (as Barnstaple) and Elmore Jones Plates, I.9.

¹⁹ Peterborough is not, of course, the only Norman town with *-burh* in its name, but as we know from documentary evidence it had minting rights it is the most probable attribution for coins with a clear mint signature BVR.

²⁰ I. Stewart, 'A new mint for BMC type VII of William I', *NC* 94 (1986), 78–9.

²¹ I am again grateful to David Parsons for advice on this point.

²² *SCBI* Estonia 1152 and a similar coin the Conte collection.

²³ F. Elmore Jones, 'Stephen type VII', *BNJ* 28 (1957), 537–54, at 551 (illus. Lockett 1145).

²⁴ W.J. Andrews, 'A numismatic history of the reign of Henry I, 1100–1135', *NC* 1 (1901), 1–515, at 363–4. I.H. Stewart, 'The Stamford mint and the connexion with the abbot of Peterborough under Eihelred II', *BNJ* 28 (1956), 106–10; *idem*, 'Peterborough and Stamford', *SCMB* 1970, 117–20; D.M. Metcalf, *An Atlas of Anglo-Saxon and Norman Coin Finds 973–1086* (London, 1998), pp. 218–19.

²⁵ K. Jonsson, *The New Era. The Reformation of the Late Anglo-Saxon Coinage* (Stockholm, 1987), pp. 157–9.

²⁶ For a critical review of the theory see F. Elmore Jones, 'New light on the abbot of Peterborough in the Norman period', *BNJ* 27 (1953), 179–81.

²⁷ M. Allen and M.R. Vosper, 'An Edward III class 15d penny of Reading', *BNJ* 69 (1999), 214–15, at 214.

²⁸ See, for example, the discussion of symbols on coins of Huntingdon in R. Eaglen, 'The mint of Huntingdon', *BNJ* 69 (1999), 47–145, at 56–8, 69–70.



BLACKBURN: METHELTUN NOT MEDESHAMSTEDE



SHARP: SIX O'CLOCK FARTHING

THE SIX O'CLOCK FARTHING OF EDWARD I

MICHAEL SHARP

Jeffrey North recorded two examples of Class 10-11 with obverse legend commencing at six o'clock but was unable to trace or illustrate either of them.¹ Another example has

turned up affording opportunity to illustrate this unusual engraving error (see Pl. 26b).

A PHOTOGRAPHIC RECORD OF HALFPENCE OF THE HENRY IV-V PERIOD

E.J. HARRIS AND S. LAIDLAW*

The small coins of the start of this period are somewhat more common than the higher denominations. This may be consequent upon Henry IV taking note of a petition by the Commons in 1402 to provide small change and so displace the various foreign coins circulating such as the 'Galley Ha'pence'. According to Walters¹ it was ordained that a third of the small amount of silver being struck should be used for the purpose. At this time the silver was prescribed to be at the rate of 18 gr (close to 1.2 g) to the penny. This valuation had become uneconomic and only some 1400 lb of silver is recorded as being brought to the Mint between 14.10.1399 and 29.9.1408 (quoted by Potter²) and this was not necessarily struck into coinage. There remain no records of activity until the ordinance passed at the end of 1411 which reduced the silver per penny from 18 to 15 gr (close to 1.0 g) which came into force at the following Easter. Between Easter 1412 and March 1413 the new lighter coins were struck for Henry IV and were prescribed to be distinguished from the heavy issue by addition of marks such as an annulet and a pellet in the field or an annulet on the breast. After Henry IV's death the light issue continued for his son Henry V. It can be seen that a new mark, a mullet, was stamped over the pellet on the old dies for the groat, halfgroat and penny, subsequently this mark appeared in various locations on the new dies which were used to strike the coins for Henry V. This change is not found to be mentioned on any known document but seems to persist over most if not all of the issues other than the halfpence. There are however several varieties of halfpenny having different features of design yet having only annulet marks in the field. The absence of the mullet from all but one of the halfpence we have been able to record leaves uncertainty about the time sequence of the varieties. A change made on half groats and pence probably late in the reign of Henry V was the substitution of a trefoil for the annulet accompanying the mullet. This seems to be paralleled on the halfpence by a trefoil being struck over or instead of one of the two

annulets. Perhaps after one trial it was not deemed essential for the mullet to be put on the halfpenny dies.

We present a series of enlarged photographs of specimens with their weights when these were available and a reference to a source of the original photograph. Several of the rare specimens were described by Walters in the Numismatic Chronicle of 1905 and featured in his Sotheby sale of 1913 (referred to as W. followed by the lot number) and later in the Lockett (RCL) sales at Glendinings and the Norweb sales at Spinks. It is notable that the weight is not necessarily a good guide to differentiate the heavy and light issues because of inaccuracy at the Mint when preparing the flan and subsequent clipping and corrosion. This has been discussed by Miss Archibald in relation to her description of the Attenborough hoard³ which also includes illustrations. The threefold enlargement we have used facilitates distinction of die differences from distortions due to striking mishaps and has allowed the multiple reappearances of the same specimen to be seen. It is notable that the excellent quality of the illustrations in old Journals and Sale Catalogues surpasses that of many of the recent examples. In some cases at the time of the early Sales bent coins were used to prepare a foil imprint which was then straightened before preparing a plaster cast to be coated and photographed. Readings of some of our examples is difficult or impossible and letter forms may be distorted in the striking. A variable feature is the spacing between the dots of the beading which may distinguish the products of different die cutters.

The first Plate commences with specimens having no added marks in the field. Plate 27, 1 (ex Attenborough Sale) is one of several examples with weights in the range 0.65-0.54 g (p.c. RCL 1374, Attenborough 1005, BM, Westminster School Sale 376). The diameter of the inner beaded circle on these coins is about 8.2 mm. The initial cross is pattée. Plate 27, 2 (Attenborough 1007, 0.65 g, W.257 = BM, RCL 3068) and 3 (Attenborough 1009 = BM, 0.63 g, RCL 3996) are from dies differing in legend endings.

¹ SCBI 39, *The J.J. North Collection, Edwardian English Silver Coins 1279-1351*, footnote 127.

* This work was carried out at the Photographic Unit of the Institute of Archaeology, Gordon Sq, London, WC1H 0PY

¹ F.J. Walters, *NC* 5, Series 4, (1905), 247-305.

² W.J. Potter, *BNJ* 30 (1960), 124-49.

³ M.M. Archibald, *BNJ* 38 (1969), 50-83.

ANGLIE and ANGLI respectively, and there is more bust shown on No. 2. The initial cross has narrow slots between the pattée arms, the diameter of the inner circles on the coins is about 7.8 mm. Plate 27, 4 (p.c., 0.56 g) and another 0.45 g) is again of a different style, HENRIC and REX are followed by double saltires. The initial cross is almost plain. The inner circle is 9 mm diameter. The reverse of a third example (RCL 1382, not illustrated here) has saltires after TAS and DON. On Plate 27, 5 (p.c., 0.54 g) the King's name is written HENRICVS, and there is a saltire after REX. The initial cross is pattée like that on no. 1. The inner circle on the coin is 8.5 mm diameter. These last specimens may all be of the heavy coinage period. Plate 27, 6 (RCL 1372., 0.54 g) is differentiated by weak annulets beside the hair so it presumably belongs either to the light coinage of Henry IV or to its continuation for Henry V. The initial cross is well pattée like those on Nos 2 and 3. It is marked by a wide letter G in the legend which is seen again on Plate 27, 7 (p.c., 0.44 g) where the same die has now well imprinted annulets at the neck level. The inner circle diameter is 8.2 mm. Plate 28, 8 (RCL 1373 = W.236) is similar with annulets by the neck but has a narrow G and a slightly pattée initial cross and tight packed beading. Plate 28, 9 (p.c. 0.56 g, and p.c. 0.51 g, Norweb 1357 0.46 g) is again similar but has the open beading as used on No. 4 and a narrow G, it has a

slightly pattée initial cross. A coin apparently from the same dies (RCL 1393, not illustrated here, 0.47 g) shows a die break at the left of the crown with the left lock of hair moved away from the face. Plate 28, 10 (p.c. 0.48 g) has annulets by the hair and double saltires about REX. The inner circle diameter is 8.2 mm. Plate 28, 11 (Norweb 1350) with inner circle diameter 8.0 mm has annulets about the hair, perhaps the one on the right has a mullet over it. This suggestion is supported by the misstruck coin Plate 28, 12 (W. 266) which clearly has the mullet at the right. Plate 28, 13 (p.c., 0.44 g) has annulets at the level of the crown., the inner circle is 8.2 mm diameter. The next three have the trefoil-annulet combination of marks, Plate 28, 14 (p.c., 0.42 g, BM) has trefoil left and annulet right of the hair, Plate 29, 15 (p.c., 0.51 g) has trefoil right and annulet left of the crown while Plate 29, 16 (p.c., 0.44 g) has trefoil left and annulet right of the hair. The inner circle diameters are about 8.2 mm. Plate 29, 17 (p.c., 0.33gram) is problematical, the crown lacks the pearls but it might be a late or illegal striking of the dies used for No. 13. It is difficult to identify striking from a particular reverse die but Plate 27, 3 and 5 are similar, as are the reverses of Plates 27, 6, 7 and 28, 8. We emphasise that the sequence of the photographs is not necessarily that of the issue of the coins and that other types may well exist.

CORRECTION TO 'DIES FOR THE HEAVY AND LIGHT PENCE, 1399-1422'

ERIC HARRIS

In my note in the last Journal (Vol. 69, pp. 215-19) the reference for photograph L3 should read W234, not W264. The photograph labelled Y6 in Plate 19 has the

obverse of one of a pair of duplicates and the reverse of the other, less good, specimen. At some stage the photo of the better reverse was lost from the sheet.

EDWARD NOURSE AND A FARTHING'S WORTH OF COPPER

R.H. THOMPSON

An extraordinary token from seventeenth-century London bears no device but a simple six-line legend on either side:

Obv. EDW:INOVRSIHIS:FAR=ITHINGE:WORTH:OF:ICOPPER:~
Rev. NEXTITHE:BVLLI:IN:BISHOPS:GATE:~STREET:II666:~¹

It is extraordinary in particular for the claim to contain a farthing's worth of copper, and for the actual weights of specimens. The Melter at the Mint was allowed 16d. per lb on copper supplied as alloy in 1649; so a farthing's worth of copper should have been 109.4 grains, effectively the same as the first specimen below.

¹ T. Snelling, *A View of the Copper Coin and Coinage of England* (London, 1766), pp. 30-1 and Pl. v.8; J.Y. Akerman, *Tradesmen's Tokens current in London ...* (London, 1849), p. 32; J.H. Burn, *A Descriptive Catalogue of the London Traders, Tavern and Coffee-house Tokens ...*, 2nd edn. (London, 1855), pp. 32-3, 267; J.P. Wilton, 'Gloucester tokens of the seventeenth, eighteenth and nineteenth centuries', *Transactions of the Bristol & Gloucestershire Archaeological Society*, 13 (1888-9), 130-45 (p. 138); G.C. Williamson, *Trade Tokens issued in the Seventeenth Century ...* (London, 1889-91), London 247 and Pl. x.3; G. Berry, *Taverns and Tokens of Pepys' London* (London, 1978), pp. 33, 135.



1



2



3



4



5



6



7







15



16



17



	g	gr
British Museum	7.10	109.6
The late Philip Greenall	8.05	124.2
Museum of London, NN17584	8.11	125.2
and NN17583	8.50	131.2
Norweb Collection	8.78	135.4
The late Roger Shuttlewood	8.91	137.5
Museum of London, 96.66/173	11.01	169.9

This last justifies Burn's claim of seven pennyweights (168 gr), though the mean weight of these seven specimens is 8.64 g = 133.3 gr. However, it looks as though any weight specified would have been the *minimum* weight, as has been suggested already for base metal tokens at this time. Thus Edward Nourse would have declared that his pieces were a farthing's worth of copper or better, viz. at least 109.4 gr, at the rate of 64 to the Avoirdupois pound of 7000 gr.²



Fig.1 © The British Museum.

The Bull in Bishopsgate, a large coaching inn also known as the Black Bull,³ was in the parish of St Ethelburga, as were the adjacent properties.⁴ The St Ethelburga registers to 1700 give only one person with the same surname as the issuer, Martha Nourse, who in 1686 married Robert Pitt;⁵ she was daughter of John Nourse of Woodeaton, Oxfordshire.⁶ The City Archivist, James R. Sewell, kindly reports that no relevant deeds have been indexed for the personal name or for the street in the Corporation of London Records Office. In the absence of a device, named trade, or spouse's initial, it is difficult to

identify the token-issuer. Among citizens of London there are two possible candidates, a vintner and a Girdler, i.e. a member of the Girdlers' Company, whose members were involved in the making of belts and other accoutrements for the army. They are set out below in order of seniority.

N(O)URSE, Edward (A), Vintner, of St Alphage London Wall, bachelor, 28, was licensed in 1636 to marry Anne Gent of Steeple Bumpstead in Essex.⁷ The future Common Councilman John Eaton was apprenticed to him in 1637.⁸ The latest record of him is in the 1641 Poll Tax at the Boar's Head, Cripplegate.⁹ There is nothing such as an inn-sign to suggest that the token is that of a vintner.

NOURSE, Edward (B), Girdler. Only son of Luke Nourse, sometime Mayor of Gloucester: baptised at All Saints, Gloucester, 19 August 1624. On 23 August 1649 he married Mary, daughter of Hugh Wells (1589–1674), of the parish of St Michael Cornhill, citizen and Armourer of London. They were married at St Olave Old Jewry, where Mary's brother was vicar until ejected for nonconformity.¹⁰ On 3 July 1651 Edward was made a freeman of Gloucester.¹¹ Luke Nourse was responsible for the City of Gloucester Farthings dated 1657, and Mr Edward Nourse 'a Member of this house' was to take care that the farthings be provided; the same service was required of him for reissues in 1659 and in 1662. On 3 June 1662 at his own request he was discharged from Gloucester Common Council, having removed himself and his family to London.¹²

Gloucester Cathedral in November 1663 paid Mr Edward Nurse 'of London' £28 10s. for the two brass branches (chandeliers) in the choir, and in addition, 4s. for a box to carry the branches from London and portage there. In the previous month payments of 2s. in sack for placing the branches, and 8s. 6d. for carriage of the branches, were paid to Mr Cockerell, probably the Samuel Cockerell mentioned in Edward Nourse's will.¹⁴ Hester, daughter of Edward Nurse and Mary his wife, was baptised on 14 May 1665 at St Michael Cornhill, where Mary herself had been baptised on 5 June 1629.¹⁵

Thomas Stevens, servant to Mr Edward 'Nuess', brazier, was buried at St Michael Cornhill on 9 November

² W. Fleetwood, *Chronicon preciosum* (London, 1745), appendix, p. 17; R.H. Thompson, 'Mechanisation at the 17th-century London mint', *Metallurgy in Numismatics*, 3 (1993), 143–53 (p. 144). Weights of the Museum of London specimens were kindly supplied by Hazel Forsyth, Curator (Post-Medieval) in the Department of Early London History and Collections, and of the Roger Shuttlewood specimen by Michael Dickinson.

³ B. Lillywhite, *London Signs* (London, 1972), no. 4049; *The Diary of Samuel Pepys*, edited by R. Latham and W. Matthews (London, 1970–83), x, 419.

⁴ J. Ogilby and W. Morgan, *The A to Z of Restoration London (the City of London, 1676)* (London, 1992), 28-F15, B.26.

⁵ W.F. Cobb, *The Registers of the Church of St Ethelburga the Virgin within Bishopsgate* (London, 1915), p. 98.

⁶ DNB s.v. Pitt, Robert, M.D. 1653–1713; Harleian Society, *The Visitation of Oxfordshire 1669 and 1675*, edited by G.D. Squibb (London, 1993), p. 37.

⁷ Harleian Society, *Allegations for Marriage Licences issued by the Bishop of London, 1611 to 1828* (London, 1887), p. 229, Publications Vol. 26.

⁸ J.R. Woodhead, *The Rulers of London, 1660–1689* (London, 1965), p. 64.

⁹ P. Boyd, *Citizens of London* (MS, Society of Genealogists), no. 34061.

¹⁰ International Genealogical Index; DNB s.v. Wells, John 1623–1676; Woodhead (above, n. 8), p. 174.

¹¹ P. Ripley, *A Calendar of the Registers of the Freemen of the City of Gloucester, 1641–1838* (Gloucester, 1991), p. 10.

¹² R.H. Thompson, 'Gloucester Farthings, 1657–1662', *BNJ* 45 (1975), 77–91, pl. vii (pp. 81–6).

¹³ There was an Edward Nourse of Gloucester, gent., father of Margaret Selwyn (died 1716 aged 91), whose monument bears the impaled arms Gules a Fess between two Chevrons Argent: R. Bigland, *Historical, Monumental and Genealogical Collections relative to the County of Gloucester*, [new edn.], ed. B. Frith (Gloucester, 1989–95), ii, 853.

¹⁴ R. Sherlock, 'Chandeliers in Gloucestershire churches', *Transactions of the Bristol & Gloucestershire Archaeological Society*, 81 (1962), 119–37 (p. 131). For Edward Nourse's will see the Appendix.

¹⁵ Harleian Society, *The Parish Registers of St Michael Cornhill, London*, edited by J.L. Chester (London, 1882), pp. 120, 145, Publications: Registers Vol. 7.

1665.¹⁶ His supplying of brass chandeliers confirms that this was Edward Nourse, and shows that, whereas he was a Girdler by Company (see below), by trade he was a brazier.

The Fire Court on 21 November 1667 heard the petition of Edward Nurse, who desired to rebuild on the site of the George in the parish of St Michael Cornhill, leased in 1651 to Hugh Wells, who had assigned the lease to the petitioner; the Court decreed that Nurse should be the builder. Foundations were staked out for Edward Nurse on Cornhill, 12 December 1667, and on 19 March 1668 in Finch Lane, a turning off Cornhill.¹⁷ The parish of St Michael Cornhill in 1674–5 paid Mr Edward Nourse £12 for the brass branch for candles given by Mrs Anne Bourne.¹⁸ Edward Nourse, citizen and Girdler of London, made his last will and testament on 2 August 1689 (see Appendix), and died at the age of 65 on 12 January following;¹⁹ on 17 January he was buried in the north aisle of St Michael Cornhill next to the chancel, where his father²⁰ had been buried on 28 April 1673, and where a memorial may still be seen:

On a marble cartouche with scrolls, palms and cherub-heads, an urn above, the following inscription:

Near this Place Lye | the Bodies of | LUKE NOURSE
late of | Gloucester Gent. who dyed | y^e 25th of April
1673 Aged 89 | HUGH WELLS late of this | Parish,
Citizen & Armourer of | London, who dyed y^e 25th of |
Feb^{ry} 1673 Aged 84 | EDWARD NOURSE | Cit. &
Girdler of Londⁿ | o<n>ly Son of s^d L.N. & | who
married MARY | Daught^r of Y^e s^d H. W. & | dyed y^e
12th of Jan^{ry} 1689 | Aged 65.

Below, on a console-bracket, a painted shield of arms:

Gules a Fess between two Chevrons Or impaling Or a Buck's Head caboshed Gules; in 1708 *Or* was recorded as *Argent*, making the arms on the dexter side the same as Nourse of Woodeaton and elsewhere.²¹

Mary Nourse, widow of Edward Nourse, was buried in the north aisle on 4 August 1708.²² It may be added that their son Edward practised as a surgeon in Oxford from 1686; he is presumably the Edward Nourse 'gent., son of a gent., late of Gloucester' who became a freeman of Gloucester in 1690. As Edward Nourse of West Ham (for which see the Appendix), gent., bachelor, about 32, he was licensed on 27 April 1693 to marry Elizabeth, about 18, daughter of Richard Hutchinson of Low Leyton; they were married at St Michael Cornhill on 3 May.²³ He was

father of another Edward Nourse (1701–61), who distinguished himself as surgeon to St Bartholomew's Hospital, and lecturer.²⁴

It is noteworthy that Edward Nourse (B) was in the parish of St Michael Cornhill by 1665, and in 1667 and later, that is, before and after the date of the token from St Ethelburga parish. This might seem to show that he was not, as assumed by Burn and his copyists, the same as the token-issuer.

Yet in the interim occurred the disruption of the Great Fire, and, as already seen, Edward Nourse (B) was burned out from Cornhill. Bishopsgate (street) lay just beyond the area of conflagration, and is close to Cornhill. No evidence has been found to connect him with the Bull in Bishopsgate, but it does not appear from the parish registers that there was an established N(o)urse family in St Ethelburga parish.

The involvement of Edward Nourse (B) with municipal tokens which were to be 'of the full weight of a Bristoll farthing'²⁵ shows that he shared the Puritan concern for good weight. As a brazier he could have had access to the relevant trades, and may have supplied the copper blanks, to judge from their rough cutting out. The token is extraordinary, and the family of Edward Nourse (B) formed an extraordinary knot of nonconformity tying London to Gloucester. These factors prove nothing, but would make it satisfying to establish that a 'farthing-worth of copper' was issued by Edward Nourse (d. 1690), baptised in Gloucester in 1624, Citizen & Girdler of London, and brazier.

To conclude: the attribution of the token by Burn, Wilton, and others, to the Edward Nourse buried at St Michael Cornhill, was an assumption. It has not been possible either to prove or to disprove this. In the light of all the evidence found, of the Great Fire in particular, the assumption may be seen as reasonable. In that case the farthing's worth of copper could have been in the nature of a ticket to advertise that Edward Nourse, who had been at the George on Cornhill, since the late conflagration was to be found in Bishopsgate Street next to the Bull.²⁶

APPENDIX

Abstract of the Will of Edward Nourse, Citizen and Girdler of London, proved London 20 January 1689/90 (PRO PROB 11/401, ff. 250v–253).

To Mary his wife an annuity of £150.

¹⁶ *Id.*, p. 255.

¹⁷ *The Fire Court: Calendar to the Judgments and Decrees of the Court of Judicature appointed to determine differences between Landlords and Tenants as to rebuilding after the Great Fire*, edited by P.E. Jones (London, 1966–), i. 175. Fire Decree B-673; P. Mills and J. Oliver, *The Survey of Building Sites in the City of London after the Great Fire of 1666* (London, 1962–7), i. 28, 33.

¹⁸ Sherlock (above, n. 14), p. 131.

¹⁹ The date on the monument is given incorrectly by Burn and his copyists as 12th June, 1689.

²⁰ Harl. Registers 7 (above, n. 15), p. 259.

²¹ [Edward Hatton], *A New View of London* (London, 1708), ii. 421; J.W. Papworth, *An alphabetical Dictionary of Coats of Arms ... forming an extensive Ordinary of British Armorial* (London, 1874), p. 738; Royal Commission on Historical Monuments (England), *An Inventory of the Historical Monuments in London* (London, 1924–30), iv. 85.

²² Harl. Registers 7 (above, n. 15), pp. 271, 280.

²³ DNB; Ripley (above, n. 11), p. 43; Harleian Society, *Allegations for Marriage Licences issued by the Vicar-General of the Archbishop of Canterbury, July 1687 to June 1694*, edited by G.J. Armytage (London, 1890), p. 255. Publications Vol. 31; Harl. Registers 7 (above, n. 15), p. 47; also J. Foster, *Alumni Oxonienses: early series* (Oxford, 1891–2), iii. 1080.

²⁴ DNB.

²⁵ Thompson (above, n. 12), p. 90.

²⁶ Work by Mr John Rhodes on the Gloucestershire token issuers will further document the Nourse family.

To his daughter Hester the messuage called Stoakhall al's Heraulds, parish of St Mary Stoke near Ipswich; Hester and others to pay to Mrs Alice Winter, widow, £7 p.a.

To his son Edward his messuage in Cornhill, parish of St Michael Cornhill, called by the name or sign of the George; his farm in the parish of Stanstead Mountfitchet, Essex; a messuage called Nutts, parish of Lambourne, Essex, and copyhold tenements held of the manor of Wolhampton al's Woolston Hall, Essex; messuages in the parish of Chigwell; three messuages in Stratford Langthorne, parish of West Ham; lands in parish of St Bride, Monmouthshire; and all other messuages in the City of London and counties of Essex and Monmouth or elsewhere in England; his wife to have possession of that part of the messuage at Chigwell called Bennetts.

Personal estate: to Mary his wife £100. To Mary and Hester, children of his late son Hugh, £500 apiece; his executor to pay £30 p.a. for their maintenance until the house in parish of St Clement Danes, Middlesex, be let and tenanted.

His wife to have use of all household goods, implements and furniture in his dwelling houses at Chigwell and Mile End. To his wife, son Edward, and daughter Hester all his plate and rings equally.

To Edward (already paid £1100) messuages beside St Augustine's Gate, parish of St Faith, London, for remainder of the terms.

His executor to pay in two yearly sums to his sister Christian Cockerell, wife of Samuel Cockerell, £16 p.a. according to the bequest of his father Luke Nourse; to his sister-in-law Elizabeth Bryers £8 according to the bequest of his father-in-law Hugh Wells, also £15 p.a.; to his son Edward £500 to enable him to pay the above sums.

To his son-in-law Thomas Humfries and his now wife £10 apiece.

To his daughter Sarah £100 at 21 or marriage.

To his sister Elizabeth Bryers £20.

To his cousin Stephen Cooke £100.

To his brother Cockerell and wife £5 apiece.

To his brother Singleton £5.

To his cousin Sarah Cooke of Gloucester, widow, £5.

To his cousin Dennis Wise £5.

To his cousin Elizabeth Cockerell £5.

To his cousin Eleanor Wise £5.

To Sarah Merriweather, his late maidservant, £5.

To his cousins Luke and Sarah Singleton £5 apiece.

To his cousin Henry Nurse and wife 20s. apiece for rings.

To his late manservant Richard Partridge £5.

To his late servant Samuel Musgrave £5.

To his friends £10 as his executor thinks convenient.

To his daughter-in-law Elizabeth Nourse, widow, £10.

To his now maidservants 40s. apiece.

To the poor in the City of Gloucester £10, also to friends and relations in Gloucester.

For mourning: to his wife £20, daughter Nourse and children £20, son Edward £10, daughter Hester £10, son Humfries for himself, wife and daughter £25, sister Humfries £10, sister Bryers £10, Stephen Cooke £10, maidservants £3 apiece, and to others as thought fit.

The residue to his son Edward, who was to be sole executor; his wife and Stephen Cooke to be overseers.

2 August 1689; witnesses Thomas Goodwin, Nathaniel Barnett, Richard Partridge, ?William Antrobus senior.

Proved London 20 January, A.D. (*stilo Angliae*) 1689.

STATISTICAL METHODS FOR IDENTIFYING POSSIBLE ISSUERS' NAMES FOR LONDON SEVENTEENTH CENTURY TOKENS DISPLAYING ONLY INITIALS

R.J. FLEET

THE International Genealogical Index (IGI), compiled by the Mormons, contains lists of the precise dates of baptisms and marriages from the sixteenth to the late nineteenth century. Many millions of names are available, between about a third and half of the population being covered for England. The IGI was used to see if there was evidence of a place of baptism of a son or child of a London vintner apprentice. The latter was a London Vintners' Company apprentice who became 'free' of the Company. Names were obtained from the Guildhall Library using documents of reference numbers 15211/1-2 and 15212/1-2. Those selected gained 'freedom admission' between 1630 and 1671. The son's first name chosen was that of the father so this increased the chances of getting a 'match' (see later). Many first born sons had the same first name as the father. No apprentices were found who gained 'freedom' before 1630 and who issued tokens. Only a few searches were done with all possible children of the vintner owing to the immense amount of time this took.

Lists were made up using the Williamson London,

Southwark, or Middlesex reference number of all suitable Tavern etc. tokens showing initials only, the wife's included, but names of issuers not shown.

The parishes at which the tokens were issued were also in the lists and the IGI data was noted where there was a 'match' between the wife's initial and the mother's name, and also between the place of origin of the token and the parish of baptism, or parishes where the origin could not be assigned to just one parish. The source for the latter information was 'Atlas and Index of Parish Registers', published by Phillimore. Where a 'match' occurred it was assumed that the name was that of the token issuer, the latter being assumed to reside in the same place for several years.

Place of marriage of the vintner was not found to be fruitful in the identification process as it was often quite distant from the abode of the couple after marriage. This is why searches were made for baptisms of children and not for marriages of the vintner.

The fact that only a fraction of the population was

present in the IGI didn't affect the accuracy of the method used in identification (see later) but meant that 'matches' were difficult to come by.

There is a source of error with this approach, for example the match might occur by chance. The probability of this is given by P as follows;

$$P = ecd$$

where; e = the number of entries in the IGI for a baptism with the appropriate name of the father and son over the correct period for the token,

c = the probability of a random match with the wife's initial (which can be found from a survey of initials on the tokens) and

d = the probability of a random match with the parish or parishes, which can be found by doing a survey of parish provenance for the appropriate token series.

However another error depends on the existence of London vintners who did not issue tokens. This is explained in the next paragraphs.

George Berry, in his book *Seventeenth Century England: Traders and their tokens* (Seaby, London, 1988), states that for London tokens of vintners, tavern-keepers etc., there were 'more than 1000 for London alone' (p. 10), and that 'in 1613 over 1000 alehouses were in the city' (p. 23). Accounting for the increase in numbers up to 1672, this suggests there were probably about 2,000 vintners, innkeepers etc. operating at any time in London, Middlesex, and Southwark during the token period. Allowing for the fact that some issued more than one token, of all those operating over the whole 25 year token period, about 1,200 are known to have issued tokens.

Guildhall records show about 2,500 brewer and innkeeper etc. London based apprentices became available for the trade from 1630-72. It may be estimated that an additional 700 apprentices were trained who are not in the Guildhall lists. The latter number can be approximately found by seeing how many known token issuers occur as apprentices in the Guildhall lists. The average number of apprentices becoming available per year is given by $(2,500 + 700)/42$ or approximately seventy six. Thus during the twenty five year token issuing period approximately 1,900 apprentices became available.

Therefore for the token issuing period there are 2,000 + 1,900 (those at the beginning plus those who appeared during the period) candidate vintners etc. from which there are 1,200 known token issuers. To simplify the analysis it is assumed that about the same number of tokens of vintners etc. were struck per year through the period. Thus the number of issuers existing at anyone time will gradually increase from zero in 1648 to 600 (1,200-2,000/3900) in 1672. This leaves approximately 1,400 vintners etc. in 1672, of whom about 1,050 may be assumed to have been married, who didn't issue tokens, and these provide a 'pool' of approximately 1,050 names that could act as substitutions and be exchanged for the apprentice name chosen from the Guildhall lists for a 1672 token. For one of 1648 the 'pool' will approach a value of 1,500 and from then until 1672 will gradually decrease to 1,050. The probability of this 'pool' effect happening is given by C as follows;

$$C = fcde$$

where; f = the number of times the issuer's initials are likely to occur in the 'pool'. The parameters c, d and e are as before and the value of f can be found by making up tables giving the relative rarity of the two letter initials of the issuers using the appropriate token series.

There are four options here. Firstly there is the probability Q that the IGI reference is indeed that of the chosen apprentice and the latter is also the issuer of the token. Secondly, the probability R that the IGI reference is that of the apprentice, but the latter is not the issuer of the token. Thirdly, the probability S that the IGI reference is not that of the apprentice but the latter is the issuer of the token. Finally, we have the probability T that the IGI reference is not that of the apprentice who is also not the issuer of the token. These probabilities are found as follows:

$$Q = (1-P)(1-C)$$

$$R = (1-P)C$$

$$S = P(1-C)$$

$$T = PC$$

The probability of the apprentice being the issuer of the token is given by $Q + S (= 1-C)$. Conversely, the percentage error in an attribution is given by:

$$\text{Error} = 100C = 100fcde$$

An identification was only accepted where the error for the 'match' was less than 5%. Other criteria also had to be satisfied before the identification was confirmed. Where the token has a date, this had to tally with the marriage date, earlier where known, or the baptism date. Most apprentices gained 'freedom' at the age of twenty one, and the date of this, obtained from the Guildhall library, must tally with the baptism, marriage, and token dates, where these are known.

Examples of error calculations:

1/W1731: John Rose and wife Alice had a son John baptised in the parish of St. Leonard Eastcheap in 1674. John gained 'freedom' in 1661. Analysing the available data, $f = 12.78$, the likely number of people in the 'pool' with initials JR, $e = 3$, $c = 0.18$, the probability of the wife's first name starting with A, and $d = 0.0066$, the chance of their abode being in the parish of St. Leonard Eastcp. Thus the chance of the identification being incorrect, the error = 4.55% (acceptable).

2/W1243: William Chamberlain and wife Martha had a son William baptised in the parish of Holborn St. Andrew in 1663. William gained 'freedom' in 1653. As above, $f = 18.02$, the likely number of people in the 'pool' with initials WC, $e = 7$, $c = 0.214$, the probability of the wife's first name starting with M, $d = 0.081$, the chance of their abode being in the parish of Holborn, St Andrew. Thus the chance of the identification being incorrect, the error = 100.0% (unacceptable).

New attributions achieved so far by this method [% error and 'freedom' date in ()] are;

1/W1731. JOHN ROSE (1.9,'61) – married to Alice – had son John baptised in 1674.

2/W243. JOSEPH MOORE (4.4,'59) – married to Catherine – had son Joseph baptised in 1663.

3/W3116A. WILLIAM PAGE(3.09,'59) – married to Mary – had son William baptised in 1663.

Some cases arise where two tokens issued by the same person exist in Williamson close together, one token having the three initials and no issuer's name, corresponding with those of another token where the name is given. Sometimes, the wife's initial can be different or absent on one of the tokens and identification still achieved. Where they come from the same locality, and have Williamson numbers close, the token with no issuer shown can have him confidently linked to the other token issuer unless inscriptions or designs on the tokens indicate otherwise. For example, pubs with different names or issuers with different trades are rejected. New confident attributions have been found in the following cases (% error given in brackets-explained below);

4/W1426A/1417. TOM HUSSEY (0.521) at 'The Three Tuns'.

5/W1435A/1419. TOM MASON (1.30) at 'The Three Tuns'.

The probability of these occurring by chance (V) is given by:

$V = abchj$ or $V = abhj$ and %error = $100V$.

where; a = the probability of the first name having the cor-

rect first letter, b = the probability of the surname having the correct first letter (survey as above), c = the probability of the wife's initial being correct (if the same on both), h = the number of available entries in Williamson for the locality, and j = the probability of the pubs having the same name (using Lillywhite's book on London signs).

For the two examples above the mean value of V was 0.91 %, suggesting the attributions to be very likely.

Example of error calculation for the second method:

10/Tom Hussey: a = the probability of the first name having the correct first letter = 0.127, b = the probability of the surname having the correct first letter = 0.108, c = the probability of the wife's initial being correct = 0.215 (initial E), h = the number of available entries in Williamson for the locality = 147, and j = the probability of the pubs having the same name = 0.0120. Thus error % = $0.127 \times 0.108 \times 0.215 \times 147 \times 0.0120 \times 100 = 0.521$

It is anticipated that further identifications will be made using these methods. For apprentices with very unusual names it might be possible to do searches to identify unmarried vintners.

TWO FINDS OF SEVENTEENTH-CENTURY TOKENS

PAUL ROBINSON

Recorded finds of groups or hoards of seventeenth-century 'tradesmen's tokens' are still relatively few in number. This note draws attention to two such finds from the West of England, which illustrate their interest and importance. Neither appears in Michael Dolley and I.D. Brown, *A bibliography of Coin Hoards of Great Britain and Ireland 1500-1967* (RNS, London, 1971).

Wootton Bassett, Wiltshire (before 1892)

In 1893 Frederick Milne Willis' *Catalogue of the Collection of Wiltshire Trade Tokens in the Museum of the Wiltshire Archaeological and Natural History Society at Devizes* was published. In the years immediately following he helped to expand that collection through gifts from his own collection and by purchases both at auction and from the London coin dealers, Spink's, Baldwins and Lincoln. In 1899 he prepared a grangerised copy of his catalogue of the tokens in the Society's collections: the two volumes are preserved in the library of the Society. They include handwritten information on the provenances of the Society's tokens, notes on the issue's and their families, information on the designs of the tokens and records of find spots, particularly when Willis believed – quite correctly of course – that these might be crucial evidence for where a token was issued in instances where this was in question.

Williamson (Wiltshire) 6 is a farthing token issued in 1666 by Edward Wits of Aldbourne, which is spelt 'Awborne' on the token. In the past it had been attributed to Lincolnshire. In his notes on the token in his

grangerised catalogue, Willis refuted this stating that the example in the Society's collection had been found at Wootton Bassett, which like Aldbourne is also in North Wiltshire together 'with several other local tokens including one of Clack (Williamson (Wills) 52). The only out-county ones being Gloucester, Bristol and Maidenhead.'

Unfortunately no other details are given of this find, which must have been made before 1893 as the Society's two examples of the Aldbourne token appear in the *Catalogue* published in that year. The Gloucester and Bristol tokens are both likely to have been 'city' tokens, which other recorded finds show circulated widely in Wiltshire. We do not know the issuers of the Maidenhead token or the other Wiltshire tokens in the find.

Pershore, Worcestershire (1758)

The *Universal Magazine* vol. 23 for 1758 carries a letter on pages 179f recording the discovery of two tokens and a royal farthing of Charles I in a cellar in Pershore in Worcestershire. The tokens, which like the royal farthing, are illustrated in the letter are a halfpenny token of Phillip Ballard of Evesham, Worcestershire dated 1664 (Williamson 47 – published from this example) and an undated farthing token of Thomas Palmer of Tewkesbury, Gloucestershire (Williamson 197). The third coin is a type I or Richmond 'round' farthing struck between 1625 and 1634. Unfortunately the detail of the illustration prevents us from identifying it in greater detail.

It is the apparent association of the Charles I farthing with the two tradesmen's tokens which is of particular

interest. From the discussion of the later history of the royal farthings of Charles I in C.W. Peck's *English Copper, Tin and Bronze Coins in the British Museum 1558-1958* (2nd edn, 1970), it is apparent that they were not officially demonetised until the Royal Proclamation of Charles II in 1672, with the subsequent Proclamations of 1673 and 1674. In principle then, royal farthings might have either continued in circulation until the reign of Charles II or, perhaps after a temporary cessation of use, may have resumed circulation after the Commonwealth in the reign of Charles II, until perhaps 1672-74. In this respect an additional comment in the account of the find in *Universal Magazine* may be relevant. Writing less than

one hundred years after the issue of the tokens, the writer favourably contrasts the good metal of the Charles I farthing with the poor quality metal of the two tradesmen's tokens.

An alternative possibility is that whereas the royal farthings may have ceased circulating in London and the main cities and towns in Britain in the 1640s, in rural areas, particularly on the fringes of England, they may have continued in use. Obviously the recording of finds such as this helps to clarify possible variations in the type of currency in circulation in different parts of England at anyone time in the past.

COIN REGISTER 2000

EDITED BY RICHARD ABDY

THE Coin Register provides a platform for the publishing of unusual/remarkable single coin finds made in Britain and Ireland and which appear to be ancient losses. All Celtic, pre-conquest Roman and Roman silver prior to AD 64, all Roman gold, late Roman from the fifth century onwards (and silver from the fourth), are welcomed, as are Anglo-Saxon, Norman or Plantagenet coins and their continental contemporaries (down to and including the 'Tealby' type of Henry II). However, coins out with these categories will still be considered on their numismatic merit.

As always, 'the essential criterion for inclusion will be that the coin is new, by virtue of either being newly found or (if previously discovered) being hitherto unpublished. Single finds from excavation sites may be included, if it seems that there would otherwise be a considerable delay in publication.'

The listing of Celtic coins in the Coin Register is carried out in association with the Celtic Coin Index at the Institute of Archaeology, Oxford. Celtic material should therefore be sent in the first instance to Cathy King, c/o the Institute of Archaeology, 36 Beaumont Street, Oxford OX1 2PG. Other material should be sent to R. Abdy, Department of Coins and Medals, British Museum, London WC1B 3DG (if practical, it would be of great help if any large amounts of text could also be sent as an attachment to raby@thebritishmuseum.ac.uk). Potential contributors may contact either of the above or the Editor of *BNJ* with any queries about how to submit and set out material.

Errata to Coin Register 1999

No. 38, a gold solidus of Valentinian II, was found at Brimpton in Berkshire, and no. 40, a gold solidus of Theodosius I, was found at South Farnham in Surrey (entry for both had been given as 'Hants or Berks'). Info. via Roger Bland of the Portable Antiquities Scheme.

Contributors

R.A.A.	Richard Abdy
E.M.B.	Edward Besly
J.D.B.	Donal Bateson
M.A.S.B.	Mark Blackburn
A.B.	Angie Bolton
M.C.	Michael Cuddeford
D.F.	Daniel Fearon
D.J.H.	David Holman
P. de J.	Philip de Jersey
C.E.K.	Cathy King
W.M.	William MacKay
S.M.	Sean Miller
V.P.	Venetia Porter
D.J.S.	David Symons
C.H.T.	Ciorstaidh Hayward Trevarthen
G.W.	Gareth Williams

Abbreviations

BM	British Museum
BMC	British Museum Catalogue
CCI	Celtic Coin Index
EMC	Early Medieval Coin Index
M/d	Metal detector
NMGW	National Museums and Galleries of Wales

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Celtic Coins

Note: as in previous years, large numbers of Celtic coins were again reported during 2000. The list that follows is therefore selective, concentrating on the publication and discussion of rare and new types.

1. Massilia, cast bronze unit, Blanchet fig. 92 (CCI 00.0964).
Obv. A
Rev. MA
 Weight: 3.4 g.
 Lakenheath, Suffolk. M/d find.

This type is listed, but not illustrated, by Brenot (C. Brenot and S. Scheers, *Catalogue des monnaies massaliètes et monnaies celtiques du Musée des Beaux-Arts de Lyon*, Leuven, 1996, p. 35), as series 7 of the period II (c.215–140 BC) bronzes *au taureau*.

P. de J.

2. West central Gaul, cast bronze unit of the Turones, BMC III, 284 (CCI 00.0235).
 Weight: 3.30 g.
 Llanmellin, Gwent. M/d find.

The type is commonly known as the *potin à la tête diabolique*. More than a dozen are recorded from southern England, but this provenance is unusually far west.

E.M.B.

3. West central Gaul, bronze unit of the Carnutes, BMC III, 123–127, LT XIX 6295 (CCI 00.0444).
Obv. E KE[SOOYI]
Rev. TASGITIOS
 Weight: 3.37 g.
 Winchester, near, Hampshire. M/d find, c.1985.
 Two previous examples are recorded from Britain, from Cambridgeshire and from the temple at Hayling Island, Hampshire.

P. de J.

4. Belgica, gold stater of the Vellocasses, LT XXIX 7234, Scheers series 25 class I (CCI 00.1346).
 Weight: 5.2 g.
 Preston, Kent. M/d find, 2000.
 The first example of this stater type from Britain.

D.J.H.

5. Gallo-Belgic, stater, class C, Scheers series 9 var. (CCI 00.1667).
 Weight not available.
 Findon, West Sussex. M/d find.

Comparison with examples illustrated by Sills (J. Sills, *Aspects of early Gaulish gold coinage*, University of Oxford, D Phil thesis, 2000, p. 322) suggests that this coin should be included amongst the insular derivatives of Gallo-Belgic C. It shares a number of distinctive features with that group, such as the heavy spike across the wreath, the circle of tiny pellets around the wheel behind the horse, and the additional group of pellets above the horse's neck.

P. de J.

6. British, stater, class LX5, VA 1509–1, BMCIA 350 (CCI 00.0949).
 Weight: 5.6 g.
 Essex. M/d find.

P. de J.

7. British, stater, class QA, cf. VA 212, BMCIA 446 (CCI 00.0973).
 Weight not available.
 Meon Valley, Hampshire. M/d find, 2000.

P. de J.

8. British, quarter stater, new type (CCI 00.0112).
Obv. two back-to-back crescents at centre of crossed wreaths; opposite sections of wreath have (for one pair) a ring with attached plain line between the two lines of leaves, and (for the other pair) a pellet with attached plain line in the same position; uncertain object (probably stylized lock of hair) in four quarters.
Rev. horse r., tail splitting into two strands towards end, two pellets and ring below, pellets and ring above, ring below tail.
 Weight: 1.01 g.
 Pitt, Hampshire. M/d find, 1991.

Another (unprovenanced) coin from the same pair of dies was recorded in trade, in 1994. The findspot of this example suggests a south Thames origin, although the obverse bears some resemblance to types found to the north of the Thames: the Whaddon Chase quarter stater VA 1488, for example, or the silver unit VA 1611.

P. de J.

9. British, quarter stater, class LY5, VA 163, BMCIA 2473 (CCI 00.1407).
 Weight: 1.32 g.
 Stoke, Kent. M/d find, 1989.

D.J.H.

10. British, silver unit, class LX27, Mack 280b (CCI 00.1226).
Obv. head l., largely disintegrated on this example.
Rev. horse standing r., boar above, pellet in ring in ring of small pellets below.
 Weight: 1.1 g.
 Fowlmere, Cambridgeshire. M/d find, 2000.

This type was first published by Derek Allen in *BNJ* 27 (1954), pp. 254–5, and classified by him as a north Thames bronze, class LX27, in his 'The origins of coinage in Britain: a reappraisal', in S.S. Frere (ed.), *Problems of the Iron Age in southern Britain* (London, Institute of Archaeology Occasional Paper 11, 1960), p. 191 and pl. xi. It subsequently appeared in the second and third editions of Mack as 280b, but was deleted by Van Arsdell (*Celtic Coinage of Britain*, London, 1989, p. 346) as probably Gaulish. It deserves reinstatement in the British series, but as a silver unit, not bronze. In addition to the example published by Allen, found at Great Chesterford in Essex, and the coin shown here, a further four are recorded in the CCI, three of which are provenanced: to Hockwold cum Wilton (Norfolk), Baldock (Herts.) and Hatfield Broadoak (Essex). The Hatfield Broadoak coin and an unprovenanced example clearly show an earlier stage of the of the obverse, with the head l., a prominent ear and large oval eye, and hair in a succession of corded S-shapes piled on top of the head. The style in general has close associations with other early silver, such as VA 1540 and 1546, and an attribution to the north Thames region seems certain.

P. de J.

11. British, bronze unit, class LX26, VA 1629, *BMCI* 401 (CCI 00.1335).

Weight: 1.6 g.

Broadstairs, Kent. M/d find, 1999.

The distribution of recent discoveries of this type strongly supports a Kentish origin, as suggested in Coin Register 1995, *BNJ* 65, no. 29. Fourteen of the fifteen examples in the CCI have been found in Kent.

D.J.H. / P. de J.

12. 'Cantii', silver unit of Amminus, VA 192, *BMCI* 2522 (CCI 00.1370).

Obv. AMMINVS

Rev. DVN

Weight: 0.95 g.

Canterbury, near, Kent. M/d find, 1999.

D.J.H.

13. 'Cantii', bronze unit, new type (CCI 00.1324).

Obv. head r., hair of many dashes, occasional rings interspersed, other rings and pellets in front.

Rev. lion leaping l., pellet and ring above, raised tail, pentagram below.

Weight: 2.3 g.

Thurnham, Kent. M/d find, 1999.

A previous example of this type was published in Coin Register 1992, *BNJ* 62, no. 87; nine such coins are now recorded, mostly in poor condition. This example has a noticeably cruder head than previous specimens.

D.J.H.

14. 'Atrebatas', silver unit, VA 867, LT XXVII 10406 (CCI 00.0269).

Weight: 1.13 g.

Winchester, Hampshire. M/d find, 1998.

The first provenanced example of a type which certainly belongs to the uninscribed silver of the south Thames region, *contra* Van Arsdell, who places it with the

Corieltavi. This coin and another (Vecchi, 8.10.1986, lot 4) clearly show a large spearhead placed vertically to the left of the boar.

P. de J.

15. 'Trinovantes' and 'Catuvellauni', silver unit of Cunobelin, VA 1951 (CCI 00.0906).

Obv. CVNOBELI

Rev. CVNO

Weight: 1.24 g.

Stanton St John, Oxfordshire. M/d find, 2000.

C.E.K.

16. 'Trinovantes' and 'Catuvellauni', bronze unit of Cunobelin, VA 1983, *BMCI* 1952 (CCI 00.1918).

Obv. [CVNOBELI]

Rev. TASC FIL

Weight: 2.12 g.

Grendon, Northamptonshire. M/d find, 1996.

Although 37 examples of this bronze unit are recorded in the CCI, 21 of them from Harlow temple, the type turns up surprisingly rarely: only four have been reported in the past decade.

M.A.S.B./P. de J.

17. 'Corieltavi', stater, class C, cf. VA 804–3, cf. *BMCI* 195 (CCI 00.0962).

Weight: 6.2 g.

Owmy Cliff, Lincolnshire. M/d find.

Variant with the leaves above the spike in the opposite direction to most examples. Several other coins are recorded with this feature, but this coin appears to be from a previously unrecorded pair of dies.

P. de J.

18. 'Corieltavi', stater, class D, VA 805–9, *BMCI* 202 (CCI 00.0963).

Weight: 6.2 g.

Owmy Cliff, Lincolnshire. M/d find.

P. de J.

19. 'Corieltavi', stater, class O, VA 835, *BMCI* 3178 (CCI 00.1900).

Weight: 5.40 g.

Ludford Magna, Lincolnshire. M/d find.

P. de J.

20. 'Corieltavi', quarter stater, scyphate type, *BMCI* 3193 (CCI 00.1873).

Weight not available.

North Lincolnshire. M/d find.

P. de J.

21. 'Corieltavi', stater of Esvp Rasv, VA 920, *BMCI* 3269 (CCI 00.1879).

Rev. IISVP RASV

Weight not available.

Lincoln, near, Lincolnshire. M/d find.

P. de J.

22. 'Corieltavi', silver unit of Dvminoc Tigir Seno, VA 974, *BMCI* 3328 (CCI 00.1959).

Obv. DVMINOC

Rev. TIGIR [S]ENO

Weight: 1.11 g.

Stenigot, Lincolnshire. M/d find.

P. de J.

23. 'Iceni', quarter stater, class ND, VA 628, BMCIA 3437 (CCI 00.0969).

Weight: 1.0 g.

Beck Row, Suffolk. M/d find.

P. de J.

24. 'Iceni', silver unit, early face/horse new type (CCI 00.1917).

Obv. bearded head l., large oval for eye; line of pellets from forehead behind eye and ear separates face from complex corded hair.

Rev. horse l., leaf tail, bifurcated front legs; small pellet in ring and two concentric rings of pellets above, pellet in ring below.

Weight: 1.38 g.

Thetford, Norfolk. M/d find.

Two previous examples of this type, with slight variation in the subsidiary motifs, have been published in Coin Register 1996, BNJ 66, no. 39, and Coin Register 1999, BNJ 69, no. 25.

M.A.S.B./P. de J.

25. Uncertain attribution, silver half-unit (CCI 00.1841).

Obv. large omega shaped object, upper edge shadowed by corded line; vertical line of dashes within the omega, above a small crescent with pellet to each side; to each side of omega, a hollow crescent with tiny animal's head attached, facing outwards; pellet border; additional decoration very worn or off the flan.

Rev. horse r., two or possibly three corded strands for tail, long spindly legs, the front pair double-jointed above and below knee, hooves turned inwards; uncertain object above.

Weight: 0.4 g.

Ongar, near, Essex. M/d find.

An extraordinary coin which more or less defies identification. The only reasonable parallel for the reverse is provided by another unpublished half-unit (CCI 00.0632), also from the north Thames region, which has a similarly spindly horse, though facing left. There is clearly much more to the obverse than can be seen here, but the visible portion of the design has no obvious parallels; one might suggest the half unit in Chris Rudd 1999 list 43, no. 23, for the general conception of the obverse, but it is far removed from this coin in detail.

P. de J.

Roman Coins

26. Nero (54–68) and Polemo II (king of Pontus, 38–64), silver *didrachm*, RPC1, 3832var.

Obv. BACIAEWC ΠΟΛ[ΕΜΩΝΟC] (diad. head of Polemo r.).

Rev. ΕΤΟΥC Κ (laur. head of Nero r.).

Weight etc. not recorded. (Illustration made up from photocopy; diameter reported as 17 mm).

South Shields (on the beach), Tyne & Wear. M/d find by A.J. Nurse, March 2000.

Legends vary from the catalogue in the use of lunate sigma and the alternative form of omega.

R.A.A.

27. Civil Wars (68–9), *denarius*, RIC 127a ('group IV, ?southern Gaul').

Obv. VESTA P R QVIRITIVM. (Veiled bust of Vesta, torch in front).

Rev. I O M CAPITOLINVS. (Jupiter std. l. in temple).

Weight 3.02 g. Die-axis 6°.

Norton Parish, Northamptonshire. M/d find by Mr M. Schollar. Recorded by Rhiannon Harte, of the Portable Antiquities Scheme (finds liaison officer for Northamptonshire) www.finds.org.uk.

R.A.A.

28. Pertinax (193), *denarius*, RIC 8.

Obv. IMP CAES P HELV PERTIN AVG. (Laur. head r.).

Rev. OPI DIVIN TR P COS II (Ops std. l.).

Weight 2.73 g. Die-axis 0°.

Norfolk/Suffolk border (TH 2985). M/d find by Mr Holdridge seen at BM 1/6/00.

R.A.A.

29. Pertinax (193), *sestertius*, RIC 20.

Obv. IMP CAES P HELV [PERTIN] AVG. (Laur. head r.).

Rev. [OPI DIVIN] TR P COS II / S C (Ops std. l.).

Weight etc. not recorded.

Hemingstone, near, Suffolk. M/d find by G. Finlow 2000. Information via John Newman (Suffolk Archaeological Service).

R.A.A.

30. Philip I (244–9), *as*, RIC 186.

Obv. [IMP] M IVL PHILIPPVS AVG (laur. dr. cuir. bust r.).

Rev. SALVS AVG / S C (Salus stg. r. feeding snake held in both arms).

Weight 11.02 g. Die-axis 0°.

North Kent, near Watling Street. M/d find by M. Davies Dec. 2000. Third century *aes* (as opposed to the silvered bronze from 260 onwards) are quite scarce finds for Britain, which mostly had to make do with recycled coins from the 1st and 2nd century.

R.A.A.

31. Carausius (287–96), laureate silver '*denarius*', RIC —, Shiel —.

Obv. IMP C CARAVSIVS P F AV. (Laur. dr. bust r.).

Rev. VIRTVS SAEC C / RSR in ex. (Lion l. with thunderbolt in jaws).

Weight 4.32. Die-axis 180°.

Holme next the Sea, near, Norfolk (opposite from Woodhenge). M/d find 2000. Information via John Pett of Spinks.

A superb new addition to the RSR series. Similar type appears with legend honouring *Legio III Flavia felix*, also with the RSR mark (Shiel 62, RIC 568 & BM 1844 4–25 2312) and with *Virtus Aug.* (Shiel 92 and RIC 591).

R.A.A.

32. Carausius (287–96), laureate silver '*denarius*', RIC —, Shiel —.

Obv. IMP CARAVSIVS P F AV. (Laur. dr. bust r.).

Rev. [...]CON[...]VCI[...] / [...]X in ex. (?Carausius receiving globe from fem. figure (?Concordia) holding cornucopia, altar between).

Weight 3.48 g. Die-axis 180°.

Somerset (exact spot not recorded). M/d find by K. Usher 2000. Recorded by Ciorstaidh Trevarthen, of the Portable

Antiquities Scheme (finds liaison officer for Dorset & Somerset) www.finds.org.uk.

A new addition to the unmarked series.

R.A.A.

33. Carausius (287–96), for Maximian, radiate, RIC 44var.

Obv. [IMP] C MAXIMIAN[VS AV]G. (Rad. dr. cuir. bust l., holding scipio).

Rev. [PAX AVGGG] / S P/C (Pax stg. l.).

Weight: 2.75 g. Die-axis 180°

Milton Keynes, near, Northamptonshire. M/d find by D. Maughan on ground disturbed by building of a roundabout on the A5 about 1980. Donated to the British Museum by Mr G.W. Salmon (BM 2001 3–2 1).

Bust variant.

R.A.A.

34. Julian (361–3), *siliqua*, mint of Lyons, RIC 219var.

Obv. D N IVLIA [NVS P F AVG. (Dr. cuir. bust with rosette diad.).

Rev. VOTIS / V / MVLTI / X in wreath. / [LV]G in ex.

Weight: 0.83 g. (2 frags.). Die-axis 0°

Fullerton, by the river Anton, Hampshire. Accidental find by Lady Wood during a fishing trip (July 2000) and presented to the British Museum by her nephew Charles Howes (BM 2001 3–1 1).

Combines RIC 219 with Kent's obverse legend classification 'J9.'

R.A.A.

35. Clipped *siliqua* with silver rivet. 5th century or later.

Obv. Diad. bust r.

Rev. illegible.

Weight: 0.94 g.

Carlton Rode, Norfolk. M/d find by A. Womack Jan/Feb. 2000. Information via Helen Geake.

Presumably a jewellery mounting.

R.A.A.

Byzantine

36. Justin I (518–27), *folles*, MIBE 35a, mint of Nicomedia.

Obv. D N IVSTINVS P P AVC (dr. & cuir. bust r. diad. with cross above).

Rev. M, with A below, cross above, stars l. & r. / NIKM in ex.

Weight: 14.27 g. Die-axis 180°

Littlehampton, West Sussex. Accidental find in a suburban garden in Ash Lane (Info. From Victor Sheppard of Rustington Heritage Assoc. 1/12/00).

Possibly an ancient loss, but more likely to have been a recently discarded curiosity.

R.A.A.

Early Anglo-Saxon Pennies (Sceattas)

37. Early penny ('sceat'), Series A, BMC type 2a, North 40, Kent, c.680–700

Weight not recorded.

Near Clipston, Nottinghamshire. M/d find, 2000. Reported by D.P. Hayes.

(Not illustrated)

S.M.

38. Early penny ('sceat'), Series A3, BMC type 2a, North 40, Kent, c.690–700.

Obv. Bust right radiate and draped; TIC before; vertical row of pellets behind head.

Rev. Square standard.

Weight: 1.12 g.

Grendon, Northamptonshire (site B). Found June 1996; reported by Peter Woods. [2000.0047]

S.M.

39. Early penny ('sceat'), Series B1b, BMC type 27b.

Weight: 0.91 g (14 gr, chipped). Die axis 90°.

In the bed of the river Teme, Ludlow, Shropshire. M/d find by Mr T. Wilson in summer 1994. The same general area of riverbed also produced a seventh century gold and glass cloisonné dagger pommel (subsequently acquired by Ludlow museum), together with a group of coins and artefacts dating from c.1200 to c.1800.

(Not illustrated)

D.J.S.

40. Early penny ('sceat'), Series B11a (BMC type 27a), English, c.710–25.

Obv. Diademed head right with cross and trefoil before face.

Rev. Bird on cross within serpent circle. Annulets at ends of horizontal bar of cross, pellets in lower angles, and trefoil of pellets before bird.

Weight: 0.92 g.

Church Laneham, Nottinghamshire. M/d find, by April 2000. Reported by Nick Herepath. [2000–0039]

S.M.

41. Early penny ('sceat'), Series C, Metcalf C1, Blackburn A, Kent, c.695–700

Obv. Crowned bust right, with characters before face mostly off-flan.

Rev. Square standard.

Weight: 1.13 g.

Grendon, Northamptonshire (site A). Found 7 October 1997; reported by Peter Woods. [2000.0046]

S.M.

42. Early penny ('sceat'), Series C2, Early 8th century.

Obv. Bust r., ÆPA in runes to front.

Rev. 'Standard'

Weight: 1.2 g. Die-axis 270°.

Preston, Kent. M/d find Sep. 2000. [2000.3]

D.J.H.

43. Early penny ('sceat'), Series C, BMC 2, early 8th century.

Obv. Bust r., [LÆ]PA or [LA]PA in runes to front (first two runes partially off-flan).

Rev. 'Standard'

Weight: 1.27 g.

Found on the Thames foreshore, east of Cannon St Station. Shown at the BM, 11.1.2000.

G.W.

44. Early penny ('sceat'). Series C imitation/mule (Series A3 obverse, Series C reverse), Kent, c.700–10.

Obv. Crowned bust right with TIC before face.

Rev. Square standard.

Weight: 1.20 g.

Elmswell parish, Suffolk. Found April 2000. Reported by Gabor Thomas. [2000.0044]

S.M.

45. Early penny ('sceat'), Series D (*BMC* type 8), North 50, Continental, c.700–15.
Obv. Standard.
Rev. Cross pommée with pellets in angles and pseudo-lettering around outside edge.
Weight: 1.23 g.
Hatfield Broad Oak, Essex. M/d find, March 2000. Found by Malcolm Parker.
S.M.
46. Early penny ('sceat'), Series D, *BMC* 2c, early 8th century
Obv. Bust r., blundered runes to front, off-flan.
Rev. Cross with four pellets, with blundered letters around.
Weight: 1.15 g
Die-axis 180°
M/D find from Somerset, shown at the BM, 9.11.2000 by C. Hayward Trevarthen.
G.W.
47. Early penny ('sceat'), Series D/E 'mule' (*BMC* type 10), North 162, Continental, c.700–50.
Obv. Bust right with pyramidal neck and runes before face (copy of *obv.* of Series D, type 2c).
Rev. Similar to *obv.* of Series E, Variety G3/G4, but the porcupine curve is turned into a human face.
Weight: 1.20 g.
Morley parish, Norfolk. Found by April 2000. Reported by Wesley Brooker. [2000.0033]
S.M.
48. Early penny ('sceat'), Series E (Variety G2), North 45, c.700–705.
Obv. Porcupine curve with spines above and triangle beneath; three large pellets at point of triangle.
Rev. Standard, with central pellet in annulet and two horizontal lines above and two horizontal lines below.
Weight: 1.21 g.
Akenham, Suffolk. M/d find, 2000. Reported by John Newman. [2001.0007]
S.M.
49. Early penny ('sceat'), early-mid 8th century imitation.
Obv. Porcupine head left, area below nose contains six pellets.
Rev. Degraded 'standard'; border legend consists of crude pellets
Weight: 1.2 g.
Woodnesborough, Kent. M/d find 30/9/2000. [2000.5]
D.J.H.
50. Early penny ('sceat'), Series E (Secondary), Continental, c.715–50
Obv. Porcupine.
Rev. Standard.
Weight: 1.12 g.
Wormegay, Norfolk. Found by March 2000. Reported by Andrew Rogerson.
S.M.
51. Early penny ('sceat'), Series E (Secondary), Continental, c.715–50.
Obv. Porcupine.
Rev. Standard.
Weight: 1.13 g.
Brailes, Warwickshire. Found March 2000 by Graham Pratt. [2000.0024]
S.M.
52. Early penny ('sceat'), Series E (Secondary), Continental, c.715–50.
Obv. Porcupine.
Rev. Standard.
Weight: 1.12 g.
North Waltham, Hampshire. M/d find, 2000. Reported by Paul Murawski.
Note the outlining of the crescent on the obverse, which may link this coin with one of the varieties found in the Franeker hoard (Metcalf's Variety F), which would put this coin in the later part of the period, the later 730s and 740s. There are also differences, though (on Variety F coins the outlining is done with small pellets, which is not clearly the case here, and the crescent is thicker and bulges in the middle), so the analogy is not secure.
S.M.
53. Early penny ('sceat'), Series E (Secondary), Continental, c.715–50.
Obv. Porcupine.
Rev. Standard.
Weight not recorded.
Sporle, Norfolk. M/d find, 4 May 2000. Reported by Katie Hinds.
S.M.
54. Early penny ('sceat'), Series E (Secondary), Continental, c.715–750.
Obv. Porcupine.
Rev. Standard.
Weight: 1.19 g.
Fincham, Norfolk. M/d find, 1999/2000. Reported by Helen Geake.
This coin is very similar to CR 1988: 114 (found near Baldock, Herts.), and may be from the same dies.
S.M.
55. Early penny ('sceat'), Series E (Secondary), Continental, c.715–50.
Obv. Porcupine.
Rev. Standard.
Weight: 0.68 g.
Fincham, Norfolk. M/d find, 1999. Reported by Helen Geake.
Helen Geake notes that this coin appears to be silver-coated bronze.
S.M.
56. Early penny ('sceat'), Series F (*BMC* type 24), North 61/62, English, c.695–705.
Obv. Hatted bust right.
Rev. Cross pattée, with symbols around edge.
Weight: 0.87 g, worn.
Burgh Castle, Norfolk. Found 1954. [2000.0045]
S.M.
57. Early penny ('sceat'), Series J (*BMC* type 37), English, c.710–25.

Obv. Two facing diademed heads, separated by cross on stand.
Rev. Border of pellets; whorl of four birds, around small cross pommée.

Weight: 0.86 g.

Wormegay, Norfolk. Found December 1999. Reported by Helen Geake.

S.M.

58. Early penny ('sceat'), Series J (*BMC* type 37), North 135, English, c.710–25.

Obv. Two facing diademed heads, separated by cross on stand.

Weight not recorded.

Ewelme, Oxfordshire. M/d find, 1999. Reported by Nick Herepath.

(Obverse image only.) [2000.0030]

S.M.

59. Early penny ('sceat'), Series K (*BMC* type 20), North 74, English, c.720–40.

Obv. Bust right with chalice before.

Rev. Standing figure in boat-shaped curve holding long cross and hawk (bird faces figure).

Weight: 0.85 g.

Canvey Island, Essex. M/d find, March 2000. Found by Gary Foulger.

S.M.

60. Early penny ('sceat'), Series K (*BMC* type 20/18), English, c.720–40.

Obv. Bust right with chalice before and four pellets above chalice.

Rev. Standing figure in boat-shaped curve holding long cross and hawk (bird faces figure).

Weight: 0.92 g.

Bourn Valley, Cambridgeshire. M/d find by Chris Gander, July 2000. [2000.0076]

S.M.

61. Early penny ('sceat'), Series O monster with standard reverse, English, c.710–35.

Obv. Beast facing right with head turned back left, and several vertical strokes between body and feet.

Rev. Standard.

Weight not recorded.

Fring, Norfolk. Found 1996? Reported by Katie Hinds.

S.M.

62. Early penny ('sceat'), Series Q I g (new variant), East Anglia, c.725–45.

Obv. Facing head with long hair.

Rev. Quadruped left, with head turned round facing right and long tail curling under body.

Weight: 1.01 g.

Ramsholt, Suffolk. M/d find, 2000. Reported by John Newman.

This looks like a new variant of Series Q I g. The obverse facing head is the same as Q I g, as is the reverse quadruped in most details. The difference is that the reverse quadruped on this coin has a long tail curling under the body from right to left, while on normal Q I g coins there is a wattle from the back of the head curling under the body from left to right. In this detail the coin is closer to Series Q I h, but since in other respects it is much

more like Q I g, the coin is classed as a variant of Q I g rather than a Q I g / Q I h mule.

S.M.

63. Early Penny, ('sceat') Series R, Type 51, c.710–35. AD. Type of the North Midlands.

Obv. Double cross ancree comprising four open looped hearts each containing a pellet and a pellet at the end of each end of the cross.

Rev. Saltire standard.

Weight: 1.21 g.

Fitzwilliam EMC 2001.0002. Thought to be the fifth known of this type.

Sleaford, near, Lincolnshire, 1999.

W.M.

64. Early penny ('sceat'), Series R, Metcalf R5, Blackburn G, East Anglia, c.715–35.

Obv. Crowned bust right, pyramid neck, runes (ep) before face.

Rev. Square standard, with right angles in top corners and diagonals in lower corners, with crosses radiating out from sides and perhaps Ts from corners of standard.

Weight: 1.03 g.

Stanton, Suffolk. M/d find, by March 2000. Reported by Chris Mycock. [2000.007]

S.M.

65. Early penny ('sceat'), Series R, early to mid-8th century.

Obv. Bust r., blundered runes to front

Rev. 'Standard', blundered letters around.

Weight: 1.07 g Die-axis 270°

M/D find from productive site near Godstone, Surrey. Shown at the BM, 16.11.99 by Mr Minty.

G.W.

66. Early penny ('sceat'), Series R, Metcalf R8, Blackburn I, East Anglia, c.730–50.

Obv. Crowned bust right, simplified to several horizontal strokes.

Rev. Square standard with crosses radiating out from the sides and Ts from the corners.

Weight: 1.15 g.

'West Norfolk'. M/d find, 2000. Reported by Adi Popescu. [2001.0008]

S.M.

67. Early penny ('sceat'), Series R, Metcalf R8, Blackburn I, East Anglia, c.730–50.

Obv. Crowned bust right, simplified to several horizontal strokes.
Rev. Square standard with crosses radiating out from the sides and Ts from the corners. Weight not recorded.

Holme next the Sea, Norfolk. M/d find, by April 2000. Reported by Roy Davis. [2000.0028]

S.M.

68. Early penny ('sceat'), Series X, *BMC* type 31, North 117, c.710–50

Obv. Facing head, with hair and beard as stylized strokes.

Rev. Stylized beast left, with head right, biting tail.

Weight: 1.10 g.

Riby, Lincolnshire. M/d find, by April 2000. [2000.0038]

S.M.

69. Early penny ('sceat'), Series X, BMC type 31, North 117, c.710–750.

Obv. Facing head, with hair and beard as stylized strokes.

Rev. Stylized beast left, with head right, biting tail.

Weight: 1.20 g.

Riby, Lincolnshire. M/d find, by January 2001.

This particular coin is a copper alloy. Two coins of the type of virtually pure copper were found at Åhus (Yngsjö) in southern Sweden, and the coins of the Terwispel hoard were also copper. See Metcalf, *Thrymsas and Sceattas*, ii.285. [2001.0006]

S.M.

70. Early penny ('sceat'), Series Z, BMC type 66, North 145, English, c.700–705.

Obv. Facing head with long hair, moustaches and beard.

Rev. Quadruped with head down right and tail curled between legs.

Weight: 1.07 g.

Near Hitchin, Hertfordshire. M/d find, September 2000.

Reported by Paul Murawski.

This coin is similar to the Type 66 coin found at Caistor-by-Norwich and illustrated in the Christie's catalogue for 4th November 1986, lot 364.

S.M.

71. Northumbrian 'styca', irregular, mid-ninth century; York, uncertain moneyer

Obv. []VVVN[]

Rev. []IV[]NI[]

Weight not recorded.

Shipham, Norfolk. M/d find, May/June 2000. Reported by Katie Hinds. [2000.0064]

S.M.

72. Northumbrian 'styca', irregular, mid-ninth century; York, moneyer perhaps Eadwine?

Obv. +VV[]

Rev. + [? EADVI[? NI] (retrograde)]

Weight: 1.07 g.

Freckenham, Suffolk. Found by March 2000. Reported by Gabor Thomas. [2000.0017]

S.M.

Later Anglo-Saxon Coins

73. Archbishop Iænberht of Canterbury (766–792), with Offa of Mercia, North 225 var, Canterbury, moneyer uncertain, c.775–792.

Obv. + IÆNBERHT A-RIEPI; Four-leaved flower over cross saltire bottonnée in inner circle.

Rev. + OFFA REX, Between lobed ends of a cross, around a smaller cross of lobes saltire; all lobes are pelleted, as is the O; more pellets around letters.

Weight not recorded.

Winnall Down, Hampshire. M/d find, 27 February 2000. Reported by Dr G. Dunger.

This looks like a new type for Iænberht with Offa. Aspects of the obverse pattern recall Blunt 57rev and Blunt 126rev (another Iænberht), and aspects of the reverse pattern recall Blunt 22obv, 57rev, 59obv.

S.M.

74. Archbishop Æthelheard of Canterbury (793–805), Group I, with Offa of Mercia, North 228 var, c.792–3.

Obv. AEDILHARD PONT, Chi-Rho monogram.

Rev. OFFA REX MER, Cross pattée.

Weight not recorded.

West Row, Suffolk. M/d find, February 2000. Reported by Chris Mycock.

This should perhaps be classed as a new variant of North 228, with a cross pattée rather than a Chi-Rho monogram on the reverse. [2000–0025]

S.M.

75. Offa of Mercia (757–96), Blunt 20, North 262, Canterbury, moneyer Udd.

Obv. + OFFA REX in the angles of a long cross bottonnée on a saltire bottonnée.

Rev. + VDD in angles of a Celtic cross with a pellet in annulet in centre.

Weight: 1.22 g. Die axis 180°.

Sleaford, Lincolnshire. M/d find, 2000. Reported by A. Wootton.

S.M.

76. Offa of Mercia, North 266, Canterbury, moneyer Babba (c.765–92).

Obv. OFFA (in angles of a cross-crosslet with lozenge centre surrounded by a circle).

Rev. BABBA (in angles of a cross-crosslet with lozenge centre containing a rosette of pellets).

Weight: 1.3 g (uncleaned). Die-axis 0°.

Preston, Kent M/d find 5/2/2000. [2000.2]

D.J.H.

77. Offa of Mercia (757–96), Blunt 6, North 267, Canterbury, moneyer Babba, probably c.780–92.

Obv. + OFFA REX, in the angles of a cross-crosslet with lozenge centre surrounded by a circle.

Rev. B / A / B / A, in the angles of a cross of pellets with fleured ends on linear square.

Weight: 1.09 g.

Hanworth, Norfolk. Found January 2000.

Derek Chick notes that this is the third example of this type known.

S.M.

78. Offa of Mercia. Non-portrait Penny. Group II coinage 787–92. North 277. Blunt 59.

Obv. +O / FF / AR / EX, in angles of a long cross bottonnée on a small saltire of lobes.

Rev. H / E / A / BE in angles of Celtic cross with a long cross fleury on the limbs and a small cross saltire in the centre. Moneyer probably Heahbeorht.

Weight: 1.14 g.

Pitt, near, Winchester, Hampshire c.1995.

W.M.

79. Coenwulf of Mercia (796–821), Portrait – Cross-crosslet type, BLS Cn. 54, c.810–821, Canterbury, moneyer Deala

Obv. []JOENVVLF REX M--, bust right, legend starting at top of shoulder.

Rev. + []LA MO + NETA, cross-crosslet, with pellet in each angle.

Weight: 0.94 g (chipped).

Near Papworth, Cambridgeshire. Found a few years before 2000. Reported by Chris Rudd. [2000.0002]

S.M.

80. Coenwulf of Mercia (796–821). Group IIIB, Cross Moline type, variety of BLS Cn 40 (North 352), Canterbury, moneyer Tidbearht, c.810–15.

Obv. + COENVVLF / REX M. Diademed bust right, breaking legend.

Rev. + TIDBEARHT MONETA (HT and NE ligatured). Cross moline, wedge and pellet in each angle.

Weight: 1.25 g (19.3 gr). Die axis: 0°.

Acquired in trade by Format of Birmingham in December 2000 and published by permission of Mr G. Charman; probably from a source in East Anglia. This appears to be the first specimen of Group IIIB to have both wedges and pellets on the reverse.

D.J.S.

81. Ceolwulf I of Mercia (821–23). Portrait type, North 378, Rochester, Ealhstan.

Obv. + CEO[L]VVLFREX[A], diademed bust r.

Rev. + JEALH-TAHMOHET (HE ligated)

Weight: 1.23 g

Die-axis 40°

Found in Northampton. Shown at the BM 29.11.99 by R. Harte.

G.W.

82. Berhtwulf of Mercia (840–52). Portrait issue, Group I, North 406, moneyer Brid.

Obv. BERHTVLF REX; bust A

Rev. + BRID MONETA; cross crosslet

Weight: 1.25 g (19.3 gr).

Harlech, near, Gwynedd. M/d find by G. Hughes, said to be a beach find, reported to NMGW August 2000.

(Not illustrated: details from scan provided by finder.)

E.M.B.

83. Burgred of Mercia. Lunette type, ? North 423, moneyer Lul.

Obv. []D / REX []

Rev. LV [] / MON []

Weight: 0.62 g (large fragment).

Heckington, Lincolnshire. M/d find, 2000. Reported by Jim Patterson.

From the lack of obvious curlicues in the angles of the lunettes, it is tempting to identify this as an originally unbroken lunette type (type (a), N 423), since worn so that there are now gaps in the lunettes. The fact that the obverse legend does not start at the base is also unusual, but is paralleled by e.g. *SCBI* 2 – Glasgow: 374–6. Acquired by the Fitzwilliam Museum.

S.M.

84. Æthelstan of East Anglia (827–45), North 437, moneyer Man.

Obv. + EPE[]AN REX, Bust right. *Rev.* + [] / MONE / TA, Inscription broken by two hooked lines. Weight: 0.96g (chipped, broken). Riddlesworth, Norfolk. M/d find, April 2000.

The coin has the same obverse die as *BMC* 5 (Pagan 1982, p. 59, l. 1), a coin of Man, hence the identification of the moneyer. The reverse type is not previously published.

M.A.S.B. / S.M.

85. Æthelstan of East Anglia (827–45), North 440, moneyer Torhthelm.

Obv. + EPELSTAN : l', in centre, A.

Rev. + TORHTHELM, cross pattée with a pellet in each angle within inner circle.

Weight: 1.08 g.

Near Braintree, Essex. M/d find, by March 2000. Reported by Michael Cuddeford. [2000.0006]

S.M.

86. Eadmund of East Anglia, North 461.

Obv. + EADMVNDREX. Cross pattée with pellet in each limb.

Rev. + BAEGHELM, Cross pattée with pellet in each limb.

Weight 1.28 g. Fitzwilliam EMC 2001.0004.

Newmarket, near, Cambs. c. 1996. (From a small scattered hoard).

W.M.

87. Æthelred II of Northumbria (c.840–8), North 188 or 190, York, moneyer uncertain.

Weight: 0.62 g, worn.

Soham, Cambridgeshire. Found by April 2000. Reported by Katie Hinds.

The coin is too worn to be identified with certainty. The obverse might read E[DL]RED, and the reverse perhaps [EANRED], and the whole is similar to the coin noted by Pirie. Coinage in the Kingdom of Northumbria, SB78.

S.M.

88. Anlaf Sihtricsson of York (941–4, 948–52), Circumscription Cross, North 541.

Obv. [AF] CVNVN [], Small cross pattée.

Rev. + RAÐ[V]T[R?], Small cross pattée, with pellet in third quarter.

Weight: 0.59 g (large fragment).

Grendon, Northamptonshire (site C). Found by April 2000: reported by Peter Woods.

CTCE records three coins of this type of Anlaf by Rathulf, and illustrates the one from the Forum Hoard at Rome at plate 27, 12 (with a pellet in the second quarter of the cross on the obverse); another is illustrated at *SCBI* 4 – Copenhagen: 639 (with a crescent in the top right of the field on the obverse). A third was found in the Wells Cathedral excavations of 1981. This fourth coin (with no pellet on the obverse and a pellet on the reverse) is from different dies than the two illustrated specimens. [2000.0048]

S.M.

Early Continental

89. Louis II (877–9) or III (879–82) of the West Franks, Morrison and Grunthal 1257, obol, mint Tours.

Obv. + M[ISER]CORDIA RE[X], Ludovicus monogram.

Rev. + TV[RO]NES CIVITAS, cross.

Weight: 0.72 g (chipped).

South Kyme, Lincolnshire. M/d find, 2000. Reported by Jim Patterson. [2000.0640]

S.M.

Early Islamic

90. Harun al-Rashid (AH 170–193/AD 786–809). Close in style to dirham of Muḥammadiya (Raay), AH 186.

Struck in AH 186/AD 802.

Only half the coin remains, but this was broken, not cut.

Found at Monkton Deverill, Wiltshire. Reported via Paul Robinson.

V.P./G.W.

Later Anglo-Saxon Coins

91. Alfred of Wessex (871–99), Two Line type, half-penny, North 640, moneyer Cynehelm.

Obv. + ELFR ED REX.

Rev. CVNEH / ELM MO.

Weight: 0.69 g.

Farnborough, West Berkshire. Found 1992. Reported by Paul Cannon.

A possibly-contemporary moneyer Cynehelm minted coins for Burgred of Mercia (852–74). [2000.0084]

S.M.

92. Eadmund or Eadred (939–55), North 688 or 706.

Obv. + EAD[...]REX

Rev. [BJERH[T ...]]. (Could be -elm, -red, -sige or -wig).

Weight 0.5 g (frag.). Die-axis 270°.

Hollingbourne, Kent, M/d find 1998.

2-line type but king/moneyer uncertain. [2000–1]

D.J.H.

93. Eadmund, (939–46). Bust crowned type without mint. North 697.

Obv. +EADMVND REX.

Rev. +FREDARD MONEIT. N reversed. M as N reversed.

CTCE 266. As for other coins of FREDARD (see SCBI 1, Fitzwilliam 588; SCBI 4, Copenhagen 720; SCBI 20, Mack, 785; SCBI 30 American, 350; SCBI 34, BM 487–8) MONEITA is spelt MONEIT. None of the other examples of Fredard are from the same die as this.

Ely, Cambridgeshire. Found at West Fen Road in excavation spoil heaps 2000. Fitzwilliam EMC 2000 0366.

W.M.

94. Edgar (957/9–975), Bust Crowned type, BMC v, North 750, CTCE 377, uncertain mint, moneyer Folcard.

Obv. + EADG[A]R REX.

Rev. + FOLCH[A]RD MONEA. Weight: 1.34 g, chipped.

Found in Essex. M/d find, 2000. Reported by Paul Murawski.

CTCE Bust Crowned 377 notes reverse readings MONET, MONEAN, MONEITA.

S.M.

95. Edgar (957/9–975), Reform type, BMC vi, North 752, Tamworth, moneyer Deorwulf, c.973–975.

Obv. [E]ADGAR REX A[N].

Rev. [+]DEORWULF –O T[].

Weight: 1.26 g (corroded and broken).

Oxford (Lincoln College), Oxfordshire. Excavation find, 1999. Reported by Nick Mayhew.

S.M.

96. Edgar (957/9–975), Reform type, BMC vi, North 752, London, moneyer Æthelweald, c.973–975.

Obv. + EADGAR REX ANGLOX.

Rev. + ÆDELPAED –O LVN.

Weight: 1.55 g.

Near Lincoln, Lincolnshire. Found c.1995. Reported by

Paul Murawski.

Damaged obverse die.

S.M.

97. Edgar (959–75), Reform type, BMC vi, mint and moneyer uncertain.

Obv. +EADGAR R_____, diademed bust r.

Rev. _____[E]–ONV_____, small cross pattée

Weight 0.37 g

Die-axis 0°

M/d find, Dorset. Shown at the BM, 31.1.2000. Cut half-penny, worn and bent

G.W.

98. Æthelred II (978–1016), First Small Cross type, BMC i, North 764, mint and moneyer uncertain

Obv. [L?]R[].

Rev. []H[].

Weight: 0.48 g (most of outer circle lost).

Oare, West Berkshire. M/d find by 1991. Reported by Paul Cannon.

Type identified from small cross reverse and three pellets before bust obverse. [2000.0085]

S.M.

99. Æthelred II, Long cross type, BMC iva, North 774, London, moneyer Ælfpine.

Obv. + ÆDELRAED REX ANGL.

Rev. + ÆLF / PINE / MO L / VND.

Weight: 1.4 g. Die-axis: 45°.

Thrandeston, near, Suffolk. Found whilst digging in vegetable plot.

Possibly same as Gordon Doubleday (Glendinning, 6/10/1987), lot 236.

D.F.

100. Æthelred II (978–1016), Long Cross type, BMC iva, North 774, York, moneyer Winigauss.

Obv. + ÆDELRAED REX ANGL.

Rev. + PE / NGO / S M / O / EOFR.

Weight not recorded.

Inkberrow, Worcestershire. M/d find by Mr F. Wiley in April 2000.

(Not illustrated)

D.J.S./A.B.

101. Æthelred II (978–1016), Long Cross type, BMC iva, North 774, London, moneyer Æthelferth

Obv. + ÆDELRAED REX ANGL.

Rev. + EDE / LFER / ð M' O / LVND

Weight: 1.46 g.

Coddanham, Suffolk. M/d find, 2000. Reported by John Newman.

S.M.

102. Æthelred II (978–1016), cut halfpenny, Last Small Cross type, BMC i, North 777, Shrewsbury, moneyer uncertain.

Obv. []DELRED RE[].

Rev. + []CROBE.

Weight: 0.53 g. Congham, Norfolk. Found by March 2000. Reported by Andrew Rogerson.

S.M.

103. Cnut (1016–1035), cut halfpenny, Quatrefoil type, North 781: *BMC* viii, Thetford, uncertain moneyer.

Obv. []REX ANG[].

Rev. []E ON / ðEO [].

Weight: 0.52 g.

Narborough, Norfolk. M/d find, April 2000. Reported by Katie Hinds.

Moneyer probably ends in -wine, but at Thetford for Cnut that could be Ælfwine, Deorwine, Eadwine, Godwine, Leofwine.

S.M.

104. Cnut (1016–35), Quatrefoil type, *BMC* viii, North 781, York, moneyer Asgautr.

Obv. + CNVT REX ANGLORVI.

Rev. + : O : SGOT M-O EO.

Weight: 1.17 g. Die axis: 270°.

Horncastle, Lincolnshire. M/d find, February 2001. [2001.0015]

S.M.

105. Cnut (1016–35), Quatrefoil type, *BMC* viii, North 781, Lincoln, uncertain moneyer.

Obv. []ANGLOR[].

Rev. + LEO[]NC.

Weight not recorded. Fragment.

Quidenham, Norfolk. M/d find, by 2000. Reported by Katie Hinds.

The mint is probably Lincoln, but there are several Lincoln moneyers of this type with names starting Leo- (e.g. Leofheh, Leofinc, Leofwine).

S.M.

106. Edward the Confessor (1042–66), Small Flan type, *BMC* ii, North 818, London, moneyer Godwine.

Obv. + EDPA / RD R.

Rev. + GODPINE ON LVND.

Weight: 1.04 g.

Wiveton, Norfolk. M/d find, August 1999. Reported by Katie Hinds.

S.M.

107. Edward the Confessor (1042–66), Small Flan type, *BMC* ii, North 818, Winchester, moneyer Æthelstan.

Obv. + EDPE / RD RE.

Rev. + ESTAN ON PINC.

Weight: 1.02 g.

Ibworth, Hampshire. M/d find, by 1999. Reported by Paul Cannon. [2000.0083]

S.M.

108. Edward the Confessor (1042–66), Small Flan type, *BMC* ii, North 818, Thetford, moneyer Eastmund.

Obv. + EDPE / RD RE.

Rev. + ESTMVND [] ðE.

Weight not recorded.

Tacolneston, Norfolk. M/d find, 2000. Reported by Helen Geake.

S.M.

109. Edward the Confessor (1042–66), Pointed Helmet type, *BMC* vii, North 825, Maldon, moneyer Godric.

Obv. + EDPE / D REX.

Rev. + GODRIC ON M/ELD.

Weight: 1.29 g.

Near Ashford, Kent. M/d find, by 2000.

Same dies as Doubleday coin.

(Not illustrated)

M.C.

110. Edward the Confessor (1042–66), Facing Bust type, *BMC* xiii, North 830, Canterbury, moneyer Aelfward.

Obv. E[AD]PARD RE

Rev. + ÆLFWARD [ON CA]NT

Weight 1.2 g. Die-axis 0°.

Thurnham, Kent. M/d find 9/9/2000.

Looks like the same obverse as *SCBI* 9/1012. [2000.4]

D.J.H.

111. Edward the Confessor (1042–66), Facing Bust type, *BMC* xiii, North 830, Chester, moneyer Leofnoth.

Rev. + EOFNA ð LECECI

Weight: 0.75 g (11.5 gr).

Harlech, near, Gwynedd. M/d find by G. Hughes, said to be a beach find, reported to NMGW August 2000.

Probably from the same reverse die as two specimens of 'Eofnath' in the Grosvenor Museum, Chester (*SCBI* 5, 366 and 367).

(Not illustrated: details from scan provided by finder.)

E.M.B.

112. Harold II (1066), PAX type, North 836, London, moneyer Leofsige.

Obv. + HAROLD REX ANGO.

Rev. + LEOFSE ON LVNDEI.

Weight: 1.16 g.

Welford, West Berkshire. M/d find, by March 2000. Reported by Paul Cannon. [2000.0022]

S.M.

113. Harold II (1066), cut halfpenny, PAX type, North 836, uncertain mint and moneyer.

Obv. []OLD[].

Rev. []BRIII[].

Weight: 0.36 g (5.6 gr, fragment only).

Brailes, Warwickshire. M/d find by Mr A. Gardner in December 1999.

(Not illustrated)

D.J.S./A.B.

Post Conquest Coins:

English Coins

114. William I (1066–87), Two Sceptres type, *BMC* iv, North 844, London, moneyer Ælfwine

Obv. + PILLEM REX AN.

Rev. + ÆLFINE ON LVND.

Weight: 1.21 g.

Stonham Aspal, Suffolk. M/d find, 2000. Reported by John Newman.

S.M.

115. William I (1066–87), Two Stars type, *BMC* v, North 845, mint and moneyer uncertain

Obv. + P[]EX.

Rev. []NE ON[].

Weight not recorded.

Narborough, Norfolk. M/d find, April 2000. Reported by Katie Hinds. [2000.0042]

S.M.

116. William I (1066–87), Two Stars type, *BMC* v, North 845, Ipswich, moneyer Ælfstan.
Obv. +PLLEM RE ANIII.
Rev. +ELFSTAN ON GIPSP.
 Weight not recorded.
 North Tuddenham, Norfolk. M/d find by Andy Carter, 1 September 2000. [2000.0087]

S.M.

117. William II (1087–1100). Cross fleury and piles type penny c.1098–1100. Romney. North 856.
Obv. +PILLEM REI
Rev. +GOLD ON RVMEN.
 Weight: 1.21 g.
 Essex/Hertfordshire borders, found 1997. Thought to be only the second on this type for this moneyer.
 [2001.0005]

W.M.

118. Henry I (1100–35), Profile/Cross Fleury type, *BMC* ii, North 858, Bristol, moneyer Barcwil.
Obv. +HENRI.
Rev. +BRCPIT ON [BIRIC].
 Weight: 1.32 g.
 Reepham, Norfolk. M/d find, August 1999. Reported by Katie Hinds. [2000.0051]

S.M.

119. Henry I (1100–35), Pax type, *BMC* iii, North 859, mint and moneyer uncertain.
Obv. +H[E].
Rev. [D?]BERD O[N].
 Weight: 0.85 g, large fragment.
 Whissonsett, Norfolk. Found March / April 2000.

The mint and moneyer of this coin are uncertain. The moneyer's name suggests Rodbert, but moneyers called Rodbert are only known for the later types Henry I *BMC* xiv and xv. There was a moneyer Rodbert at Rochester, and coins of Rochester survive in *BMC* i and *BMC* vii, so a Rodbert of Rochester coin of *BMC* iii would be a plausible guess.

S.M.

120. Henry I (1100–35), Voided Cross and Fleurs, *BMC* v, North 861, Winchester, moneyer Godwine.
Obv. +HENRIC : REX.
Rev. +GODPINE : ON : PINCE.
 Near Winchester, Hampshire. Found a few years before 2000. Reported by Jeremy de Montfalcon.
 (No photograph available)

S.M.

121. Henry I (1100–35), Quadrilateral on Cross Fleury type, *BMC* xv, North 871, Exeter, moneyer Helgi?
Obv. [+h]ENRICVS
Rev. JEtth:ONEX[
 Weight: 0.88 g (13.6 gr), fragment, fairly worn.
 Chepstow, Monmouthshire. M/d find near Castle, August 2000. Reported to Hunterian Museum, which provided photograph.
 Cf. *SCBI* 20, 1568.

E.M.B./J.D.B.

122. Henry I (1100–35), cut halfpenny, Quadrilateral on Cross Fleury type, *BMC* xv, North 871, mint and moneyer uncertain

Obv. [E]N[VS].

Rev. +[JE.

Weight not recorded, chipped.

Sporle, Norfolk. M/d find, 1999. Reported by Katie Hinds.

S.M.

123. Stephen (1135–54), Watford type, *BMC* i, North 873, mint uncertain, moneyer Rodbert
Rev. + ROD[i].
 Weight: 0.37 g, large fragment.
 Cawston, Norfolk. Found by March 2000. Reported by Andrew Rogerson.

S.M.

124. Stephen (1135–54), Watford type, *BMC* i, North 873, London, moneyer Beorhtmar.
Rev. + BRICMAR ON [LV]ND.
 Weight: 1.36 g. Worn.
 Near Ridgmont, Bedfordshire. M/d find by Vivienne Latham in March 2000.

S.M.

125. Stephen (1135–54), cut halfpenny, Watford type, *BMC* i, North 873, mint and moneyer uncertain.
Obv. [JNE :.
Rev. [JN[M?O?].
 Weight not recorded.
 Costessey, Norfolk. M/d find, April 2000. Reported by Katie Hinds.

S.M.

126. Stephen (1135–54), Watford type, *BMC* i, North 873, mint and moneyer uncertain.
Rev. [G?]IP[?].
 Weight not recorded.
 Narford, Norfolk. M/d find, April 2000. Reported by Katie Hinds.

The mint may be Ipswich (GIPES); the moneyers Edgar, Ælfric, Edmund, Osbern, Pagan and Rogier are known to have minted Stephen's type I at Ipswich.

S.M.

127. Stephen (1135–54), cut quarter, Watford type, *BMC* i, North 873, Exeter, uncertain moneyer.
Obv. + ST[].
Rev. [JN : EA[].
 Weight not recorded.
 Sporle, Norfolk. M/d find, 1999. Reported by Katie Hinds.

Recorded Exeter moneyers of Stephen *BMC* type i include Ailric, Algar, Brithwine and Semier.

S.M.

128. Stephen (1135–54), *BMC* i, North 873, Norwich, moneyer Sihtric.
Obv. +S[TIE]FNE
Rev. [+S]ihTRIC[ON]:N[]
 Weight 1.4 g. Die-axis 45°.
 Sandwich, near, Kent. M/d find 5/11/2000.

Mint and moneyer are the most likely candidates based on the surviving legend, but I have not checked the dies for this coin.

D.J.H.

129. Stephen. BMC ii, North 878, Sandwich, moneyer Wulfric. (c.1145–50).

Obv. [STIEFN]E

Rev. PVLFR[ICON:SAN]

Weight 1.4 g. Die-axis 90°.

Woodnesborough, Kent. M/d find 30/9/2000.

Same dies as BMC 169 and rev. as SCBI 30/781. [2000.6]

D.J.H.

130. Stephen (1135–54), Awbridge type, BMC vii, North 881, mint and moneyer uncertain.

Obv. [SJTIE] .

Rev. [+R]ODB[E?].

Weight: 1.19 g (chipped, worn).

Horncastle, Lincolnshire. M/d find, 2000. Reported by A. Wootton.

The moneyer is probably Rodbert of London, though the moneyer's name is incomplete and the mint name completely worn away.

S.M.

131. Stephen (1135–54), BMC vii, mint uncertain, moneyer Roger.

Obv. Bearded bust, three-quarters l. crowned and holding sceptre in right hand, legend off-flan

Rev. [RO]GER:ON[RE], cross voided within quatrefoil, fleur in each angle

Weight 1.23 g

Die-axis 180°

M/D find from productive site near Godstone, Surrey, shown at the BM 16.11.99

G.W.

132. Stephen (1135–54), cut halfpenny, Cross and Fleurs type, BMC iii, North 896, Norwich, moneyer Eadstan.

Obv. + ST[I]E[F].

Rev. + ED[S?]NOR.

Weight: 0.56 g.

Found in Norfolk in 2000. Reported by John Ogden.

Compare SCBI 26 – East Anglian: 1465, an erased die coin of Eadstan of Norwich with the same cross-and-fleurs reverse, and visible letters EDS[]NOR.

S.M.

133. William, Earl of Gloucester (1147–83), Lion type, North 945 var

Obv. [LLEL] . Lion to right.

Rev. []CV[], Cross fleury with thick cross bottonnée and thinner saltire bottonné in centre.

Weight not recorded.

Near Wimborne, Dorset. M/d find, March 2000.

North only records Lion coins for Robert of Gloucester (N 943/1), but there are eight Lion coins of William in the Box Hoard (CH 1996: 133). Robert Earl of Gloucester died in 1147, and William, his first son and heir, died in 1183 (Handbook of British Chronology p. 463).

M.A.S.B./S.M.

134. Henry II (1154–80), cut halfpenny, Tealby type, Series A, North 952, uncertain mint and moneyer

Obv. []REX ANG[]

Rev. []H[]ORE[]

Weight not recorded.

Rowington, Warwickshire. M/d find by Mr A. Rose in March 2000.

There are 2 or 3 uncertain letters between the H and O on the reverse.

D.J.S./A.B.

135. Henry II (1154–89), Tealby type, Series A/B, North 952–955, Norwich, moneyer Nicole.

Rev. [N . C . L : O N : N]

Sutton-cum-Granby parish, Nottinghamshire. Found 9 April 2000.

S.M.

136. Henry II (1154–1189), cut quarter, Tealby type, Series B, North 953–955, Ipswich, moneyer Nicole.

Rev. []OL : O[]

Weight: 0.29 g.

Letheringsett with Glandford, Norfolk. M/d find, August 1999. Reported by Katie Hinds.

S.M.

137. Henry II (1154–1189), cut halfpenny, Tealby type, Series C, North 956–957, uncertain mint and moneyer.

Weight: 0.61 g.

Little Cressingham, Norfolk. Found February 2000. Reported by Katie Hinds.

From the regular shape, this is probably a coin of Carlisle or Newcastle, in which case it was minted by William FitzErembald.

S.M.

138. Henry II (1154–1189), Tealby type, Series C–E, North 956–960, uncertain mint and moneyer.

Weight not recorded.

Cringelford, Norfolk. M/d find, 2000. Reported by Katie Hinds.

S.M.

139. Henry II (1154–89), Tealby type, Class D, North 958–9, London, moneyer Edmund.

Rev. +EDMVND:ON[LV]N:

Weight: 1.37 g (21.1 gr).

Kington St Michael, Wiltshire. M/d find by Mr Garrod, February 2000.

E.M.B.

140. Henry II (1154–89), Tealby type, Series D–F, North 958–961, uncertain mint and moneyer.

Obv. []EN[]

Rev. [CA] : O[]

Weight not recorded.

Bowthorpe, Norfolk. M/d find, by 2000. Reported by Katie Hinds.

This is a late Tealby coin in poor condition. It may be a coin of the moneyer Ricard, most likely Ricard of Canterbury who minted through to type F, though there was also a Ricard of London who minted type D.

S.M.

141. Henry II (1154–89), Tealby type, Series E/F, North 960/961, uncertain mint and moneyer.

Weight not recorded.

Cranwich, Norfolk. Found January 2000. Reported by Katie Hinds.

S.M.

142. Henry II (1154–89), Tealby type, Class F, North 961, Thetford, moneyer Willem.
Rev. [H]WILE[LM]:ON:T[EF]
 Weight: 0.95 g (14.6 gr). Die-axis: 270°.
 St Nicholas, Vale of Glamorgan. M/d find by E. Pestuccio, May 2000.
 Cf. *BMC* 742 for spelling of moneyer.

E.M.B.

143. Henry II (1154–1180), Tealby type, Series F, North 961, uncertain mint and moneyer.
Obv. [J]REX[].
Rev. Illegible.
 Weight: 1.31 g (20.2 gr).
 Alcester, Warwickshire. M/d find by Mr G. Ross in October 2000.
 (Not illustrated)

D.J.S./A.B.

144. Charles I (1625–49), groat, Exeter 1644, Besly A1, North 2579.
 Weight: 1.14 g, fragment.
 Llantwit Major, Vale of Glamorgan. M/d find by A. Jones, November 2000.
 Finds of the minor denominations of the royalist mints are unusual. A threepence from the 'Worcester/Salop' series (Sir Thomas Cary's mints) was found near Cowbridge, not far away, in 1988 (*BNJ* 58, Coin Register, no.252).
 (Not illustrated.)

E.M.B.

European Coins

145. Brabant, Philippe le Bon (1419–67), double patard, Louvain 1466–7, V.G. & H. 8–1.
 Weight: 2.72 g, incomplete.
 Llantrithyd, Vale of Glamorgan. M/d find by A. Jones, November 2000.

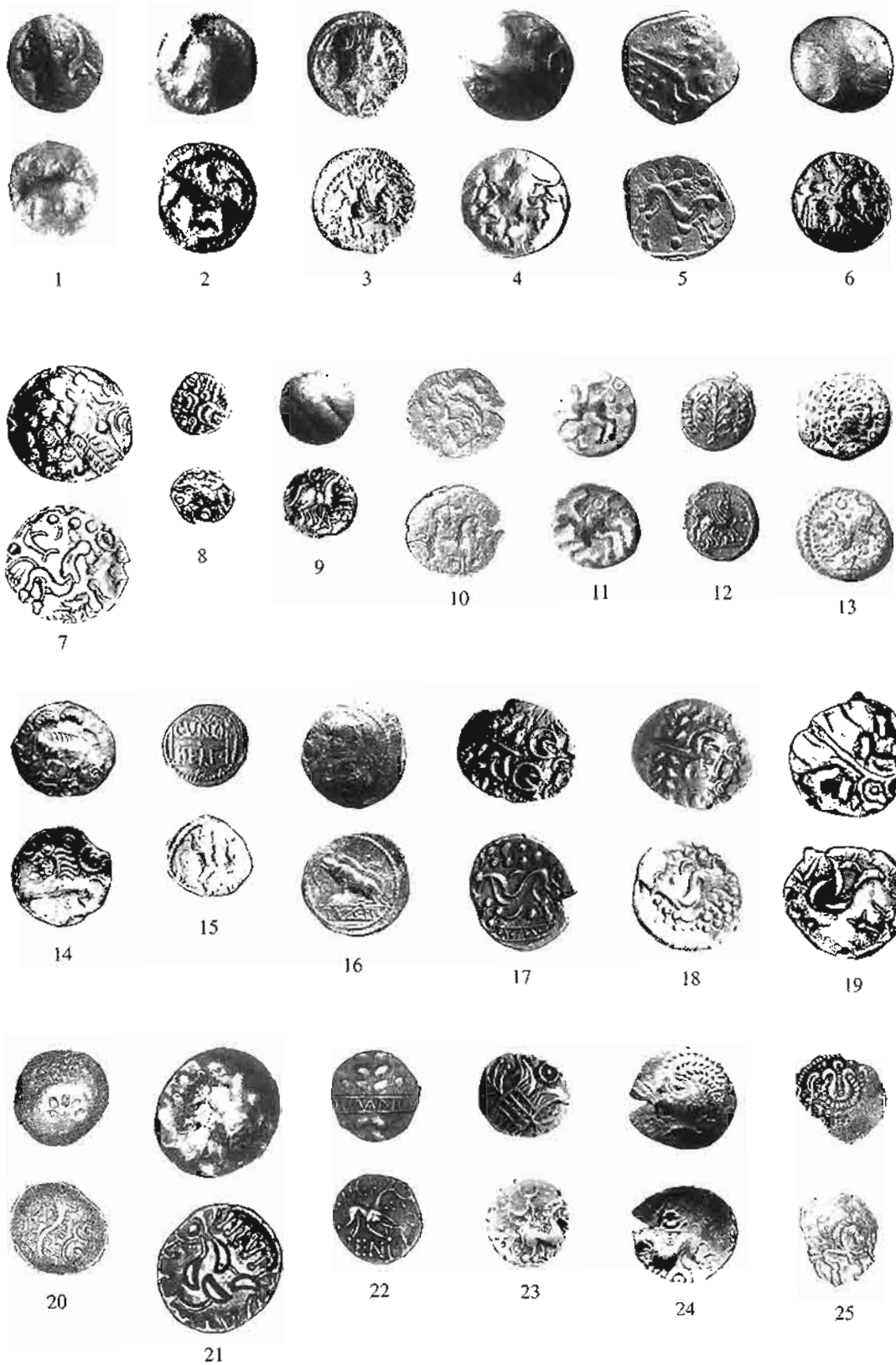
E.M.B.

146. Italy, Venice, Doge Nicolo Tron (1471–73), silver soldino.
Obv. Ni*TRON VS*DVX, in field L/M.
Rev. Nimbate lion left, holding Bible.
 Weight not recorded.
 Coleshill, Warwickshire. M/d find by Mr E. Teague in September 2000.
 (Not illustrated)

D.J.S./A.B.

147. Spanish Netherlands, Albert and Isabella (1598–1621), quarter patagon, Tournai, n.d. (1612–18), V.G. & H. 313–17.
 Weight: not recorded.
 Wiveliscombe, Somerset. Garden find, May 2000.
 For a discussion of finds of Spanish Netherlands coins in Civil-War England, see *BNJ* 68, pp. 154–7. West Country finds are now supplemented by this coin and a ducaton in the 1644 Totnes, Devon, hoard (*BNJ* 69, 151–4).
 (Not illustrated; identified from a scan.)

E.M.B./C.H.T.





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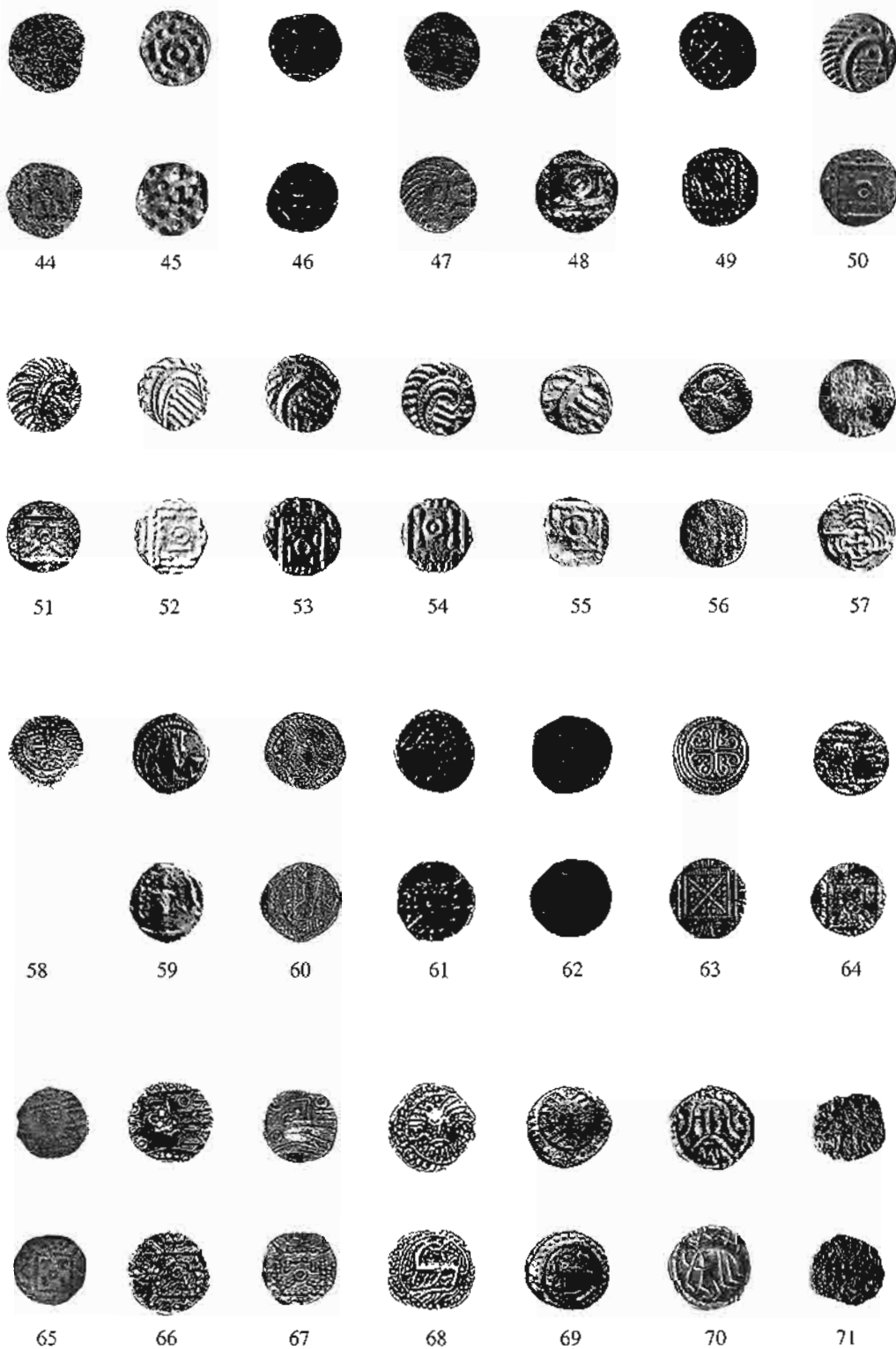
40

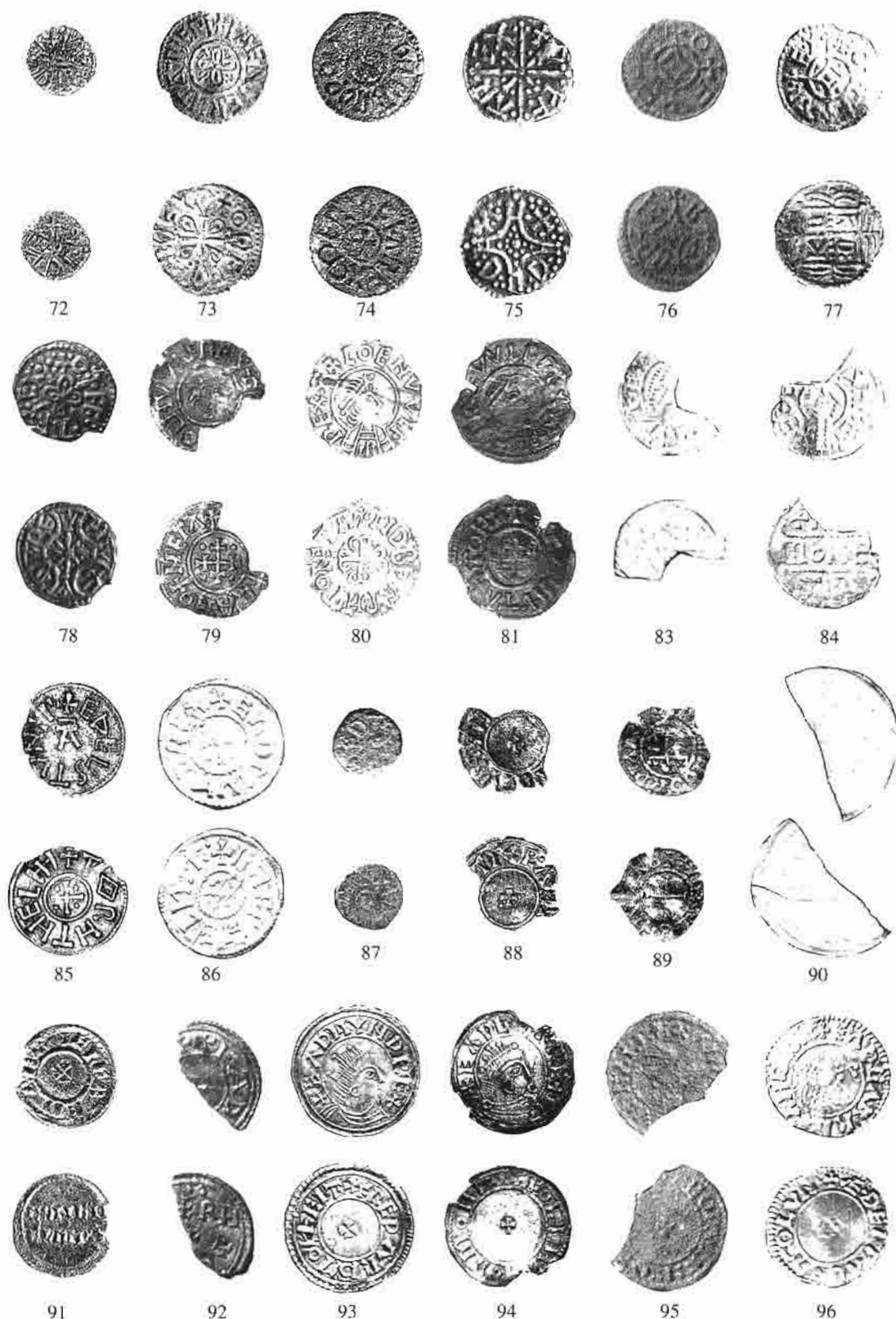
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42

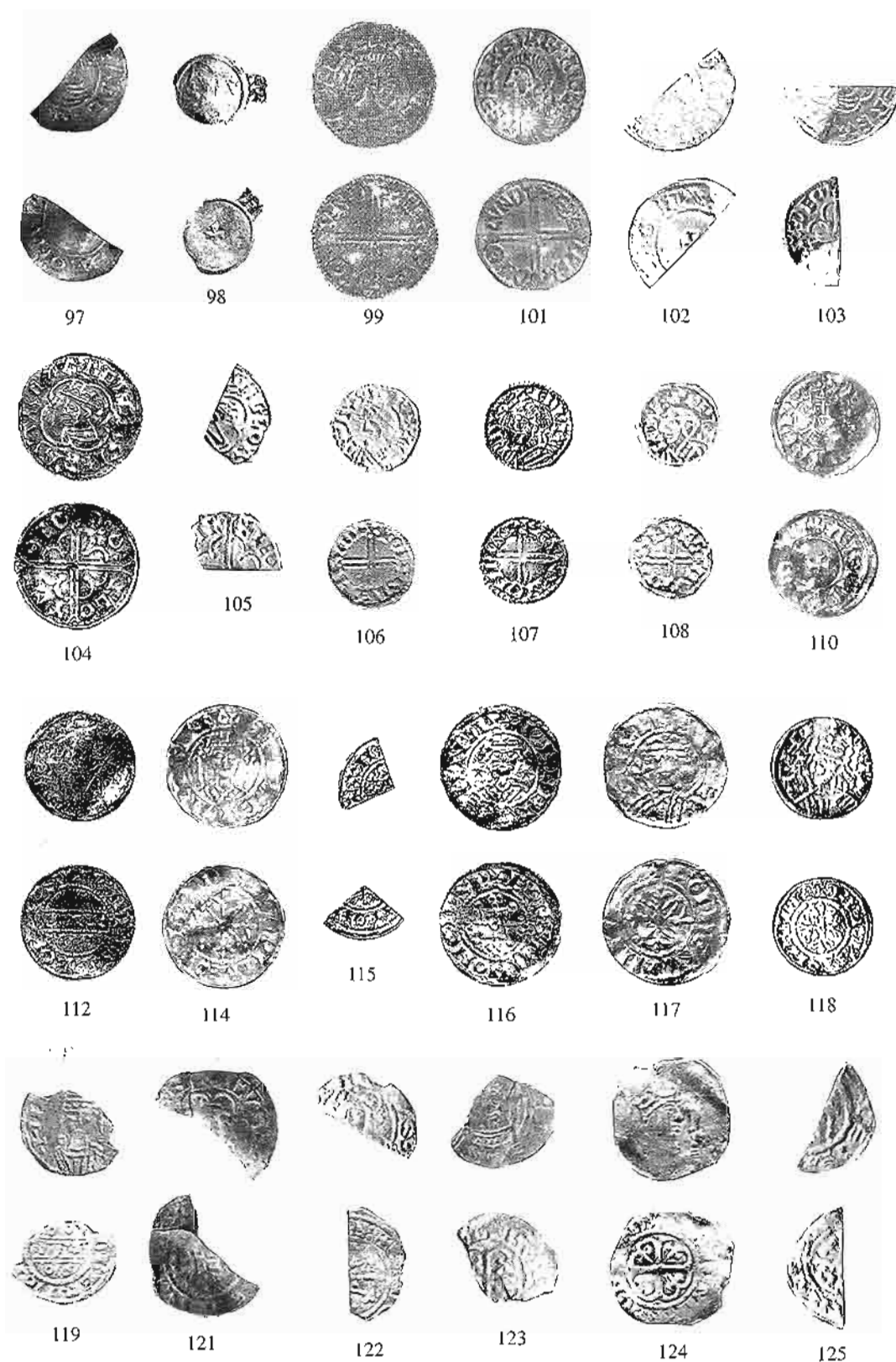
43

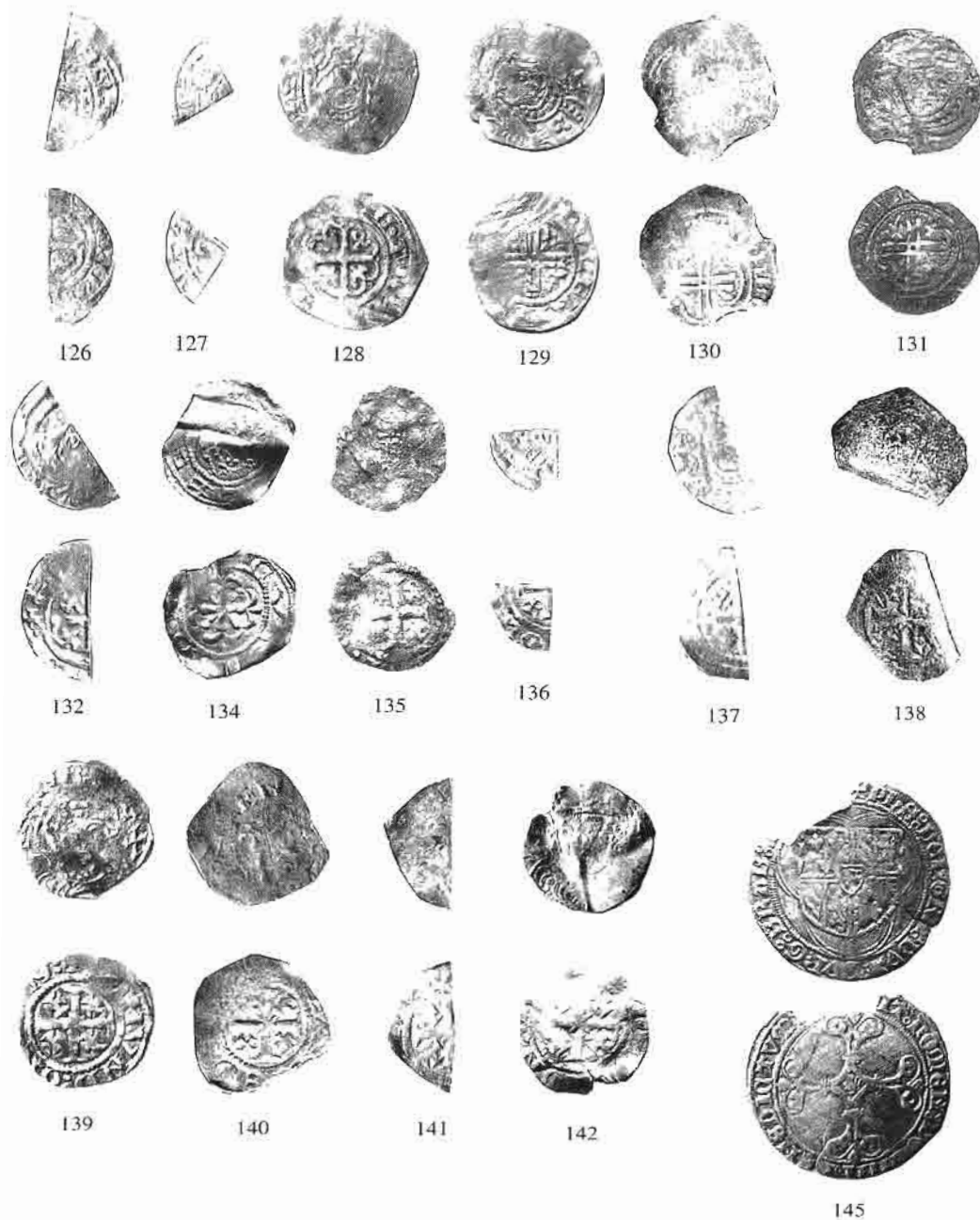
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COIN REGISTER 2000: EARLY ANGLO-SAXON CONT., EARLY CONTINENTAL, EARLY ISLAMIC,
LATER ANGLO-SAXON





REVIEW ARTICLE

Kings, Currency and Alliances: History and Coinage of Southern England in the Ninth Century, ed. Mark A.S. Blackburn & David N. Dumville (Studies in Anglo-Saxon History IX, Woodbridge, 1998). 259 pp., 11 plates.

This set of studies by nine authors from different backgrounds is particularly valuable for the new light it throws on the role of London in the changing fortunes of Mercians, West Saxons and Danish Vikings during the half-century after c.840. It includes detailed numismatic studies of two scarce coinages: one of Berhtwulf of Mercia (840–52) by James Booth and the other of southern England during the reign of the last Mercian king, Ceolwulf II (874/5–879/80), by Mark Blackburn and Simon Keynes. Interdependent with the latter and with each other are important papers by Dr (now Professor) Keynes, 'King Alfred and the Mercians', and Dr Blackburn, 'The London mint in the reign of Alfred'.

In a group of general articles about the period, Professor Thomas Charles-Edwards writes on the significance of baptismal relationships between dynasties and shows that those recorded in treaties between Viking raiders and Frankish or Anglo-Saxon kings have origins as far back as the beginnings of Christianity in Wessex. Lord Stewardby demonstrates a number of probable identities between moneyers and *ministri* named as grantees of land or witnesses to charters. Paul Bibire discusses linguistic features of the names of kings and moneyers as reproduced on the coins, and finds strong Kentish influence on the moneyer-name forms on Mercian coins that numismatists attribute to London.

Professor Michael Metcalf provides a detailed topographical analysis of the monetary economy of ninth-century England south of the Humber, based on 450 single finds recorded up to the late summer of 1991 and published here by Michael Bonser. The pattern which emerges is of a plentiful scatter almost everywhere in southern and eastern England and the east Midlands, but virtually nothing from Wales or the Marches or from south-west England beyond Exeter, and very little in the Severn Basin or the west Midlands. By using regression analysis, Metcalf demonstrates two contrasting types of mint-profile, with Canterbury, Rochester and London together accounting for two-thirds of the finds, seemingly much more involved with long-distance trade than the mints of East Anglia and, especially, Wessex, which on this evidence had a more local function.

For his essay 'Monetary Alliance or Technical Co-operation', Dr Booth assembled in April 1989 a corpus of eighty six or eighty seven coins of Berhtwulf (the eighty seventh possibly attributable instead to Beornwulf) and while retaining the division by style of bust adopted by J.J. North, shows that they comprise significant groupings from either end of his coinage – Group I, from dies apparently cut by Æthelwulf's Rochester engraver (Bust A, 32 coins), and Group III, with no stylistic link to the coinage of the West Saxon king (Bust G, 21 coins) – and between them, Group II, which is a series of smaller varieties (Bust B, 3 coins; Bust C, 7; Bust D, 1; Bust E, 7; Bust F, 12, including no.83 which is from the same dies as no.57). In

addition there are three (or four) coins from non-portrait obverses (Group IV).

Booth dates the start of this rare but evidently quite substantial coinage to c.845 and discusses the question of whether the style of die-cutting in Group I implies that Berhtwulf was initially given minting rights in Rochester (including the services of one of Æthelwulf's moneyers there, Brid, who is known for coins of both kings) or alternatively that he arranged with the West Saxon ruler for the Rochester engraver to cut dies for new moneyers appointed in London (and for Brid to be transferred there temporarily to assist them). Booth prefers the latter explanation, concluding that the arrangement must have been of some duration and could have involved the movement of either the dies or the engraver.

As has been mentioned, Booth essentially follows North in dividing the coinage according to the style of portrait, though in Group III he adopts a subdivision by reverse design in preference to North's division by the number of bands in the king's diadem. Nevertheless it is doubtful whether it is justifiable to continue designating two of the busts in Group II as forming separate sub-groups. Thus although Bust D is distinctive it is found on only one coin, the reverse design of which (a cross with an annulet in each angle) is featured also on some coins of Groups A, C and E. Again, Bust B is at best transitional between A and C since it is clear from the illustrations that the three recorded specimens (nos 33–5) are in fact all from the same obverse die. The first of the reverses is from a die of regular style naming Brid; the second names another established moneyer, Deneheah, and could be irregular because the legend is retrograde; but the third is from an undoubtedly irregular die which inexplicably copies the obverse of Æthelwulf's Kentish *Cross-and-Wedges* issue to the extent of naming the West Saxon king. Booth is rightly reluctant to accept this latter coin as evidence for some attempt at monetary union.

The volume passes over the coinages of the immediate successors of Æthelwulf and Berhtwulf, and detailed attention is next turned to the issues of the middle and later 870s, in particular the type known as *Cross-and-Lozenge*.

When Alfred succeeded his brother Æthelred in 871, the *Linettes* type begun nearly twenty years earlier by Burgred of Mercia and adopted by Æthelred was still in issue, becoming progressively lighter and more debased. There is no reason to think that the type was discontinued before Burgred's expulsion by the Danes in 874, and if it was continued for a time by Alfred there is no evidence that Burgred's successor, Ceolwulf II, took part in it. He was apparently required by the conquering Great Army to hold Mercia at their disposal in preparation for settlement, much as the ephemeral characters installed as successors to Osberht and Ælla in Northumbria and Eadmund in East Anglia seem to have had to do (in the latter case they are known only from their coins). Ceolwulf is assigned a reign of five years in the surviving Mercian regnal list from Worcester, but he had to agree to a partition of his kingdom in 877 and is not known to have played any part in Alfred's decisive victory at Edington in 878, after

which the Viking army retired to its base at Cirencester in south-west Mercia. He may of course have been required by the Danes not to take up arms against them.

Nevertheless Ceolwulf participated with Alfred and Archbishop Æthelred of Canterbury in an issue of fine silver and good weight which from its reverse design is nowadays referred to as the *Cross-and-Lozenge* type. Given Ceolwulf's disappearance from the scene c.879/80 it seems impossible to link this reform of the coinage with the victory at Edington, and Blackburn suggests a date of 875/6 'when Alfred might reasonably have thought that his worst troubles were behind him' (p. 120). It appears that the issue did not immediately follow the *Lunettes* issue, as a tiny number of specimens exist of types which appear to be intermediate between them, one (*Two Emperors*) struck by Ceolwulf as well as Alfred.

In their corpus Blackburn and Keynes record details of fifty-one *Cross-and-Lozenge* coins, and a lead weight impressed with a pair of dies not represented among them. Thirty-six coins and the lead weight (the latter found in St Paul's Churchyard, London) name Alfred, while eleven are of Ceolwulf and four of the archbishop. Eleven of the coins (seven of Alfred and all those of the archbishop) are of distinctive styles that can be associated with Canterbury die-cutting; twenty-one (twelve of Alfred and the lead weight, nine of Ceolwulf) with London, plus the lead weight; eleven (ten of Alfred and one of Ceolwulf) with Winchester; and eight (seven of Alfred, one of Ceolwulf) of uncertain die-cutting.

On stylistic grounds Blackburn and Keynes conclude that in London the issue was initially in Alfred's name and later in Ceolwulf's. However, two pence of the principal moneyer Liawald have since come to light, one of Ceolwulf (Fig. 1a) and the other of Alfred (Fig. 1b) (*Num. Circ.* Feb. 1999, 326 and Mar. 1999, 743), which seem to be at variance with that opinion. The Ceolwulf coin is of fine style and good weight (1.45 g) and depicts the cruciform limbs on the reverse with moline ends, all of which point to an early date. It also spells the king's name CEOLVVLF rather than CIOLVVLF. The Alfred piece on the other hand has a cruder portrait, similar to no. 59 (the obverse of which has unfortunately been transposed with that of no. 60 on Plate 10) and, like that coin, gives Alfred the Saxon title. Its weight is light (1.17 g) but that does not necessarily denote lateness, since no. 59 weighs 1.38 g. Nor can the title be adduced as evidence of an early date, since it is also found on the rare non-portrait mint-signed coins of Winchester and Exeter later in Alfred's reign and Bath in his successor's.



Fig. 1

Blackburn, in his review of the London mint, concludes that the *Cross-and-Lozenge* coinage and earlier intermediate issues were struck from c.875/6–c.879/80 and that the *Two-Line* issue began soon afterwards, preceded at London by the *Monogram* issue and at Gloucester by another portrait issue, known from a single surviving specimen which names the town (ÆT GLEAPA) but not the moneyer. This has several design features in common with *Cross-and-Lozenge*, but superimposed on the pelleted long-cross limbs is a large central cross instead of a lozenge. The weight (1.59 g) is too high for the coin to have been minted during that issue, nor would one expect Alfred to have had minting rights in Gloucester during Ceolwulf's lifetime, but a date not long after the end of *Cross-and-Lozenge* does seem likely.

The *London Monogram* issue is curious in breaking with tradition in the south-east by generally not naming a moneyer, the only significant exception being Tilewine. He may perhaps have been the successor of the commonest *Cross-and-Lozenge* moneyer Liawald, who is otherwise known only for Burgred. The normal engraver of *London Monogram* obverses seems not to have been the person who had cut *Cross-and-Lozenge* dies of moneyers attributed to London, for the busts are fuller in the face and engraved in finer detail. Despite the inclusion of some twenty-five *Cross-and-Lozenge* coins in the Cuerdale hoard there is little evidence, if any, for that issue having been imitated in the Danelaw, whereas both the *London Monogram* and *Two-Line* issues clearly were. This could mean that the Danish settlement which would have created a demand for local minting had not developed sufficiently before the end of *Cross-and-Lozenge*, but it might also indicate that *London Monogram*, being apparently a limited issue, did not immediately follow *Cross-and-Lozenge* c.880, as Blackburn suggests. On the other hand the *Monogram* issue was struck to a higher weight-standard, as was *Two-Line*, so there could well have been a recoinage at the end of *Cross-and-Lozenge* which would explain why hoards deposited during the *Monogram* issue do not contain coins of *Cross-and-Lozenge*, and would also mean that the current coins available thereafter for imitating in the Danelaw would not have included them either.

Nevertheless there are grounds for exercising caution before accepting Blackburn's interpretation of the evidence of the *Cross-and-Lozenge* and *London Monogram* issues for the situation in London, namely that after Burgred's exile in 874, Alfred's authority was recognised by the moneyers there; that in the later 870s the situation changed and the Mercian king was recognised as ruler of London; that the *Monogram* type was struck c.880, soon after Ceolwulf's demise; and that the coinage shows the Vikings were not in control of London during the later 870s and early 880s, as had hitherto been thought.

First, there is the problem of the *Two Emperors* type which appears to have preceded *Cross-and-Lozenge*: although known from only two surviving coins, one of these is of Alfred and the other of Ceolwulf. The latter's moneyer, Ealdwulf, had previously worked for Burgred and is also named on the lead weight that was found in St Paul's Churchyard impressed with *Cross-and-Lozenge* dies of Alfred. Blackburn thought that spelling the king's name CEOLVVLF militated against an attribution to London, but now that a *Cross-and-Lozenge* coin by the

moneyer Liawald has been discovered with that spelling instead of the usual CIOLVVLF, this objection falls away. It seems therefore that London could well have minted for Ceolwulf soon after Burgred's expulsion and without first passing into Alfred's hands. Whether Alfred exercised authority in London from early in the *Cross-and-Lozenge* issue until towards its end is a debatable point: Ceolwulf's coins are too rare to provide incontrovertible stylistic evidence.

Secondly, there is no overlap between moneyers named on the *Cross-and-Lozenge* and *Monogram* issues. Allowing for the likelihood of a different engraver and the commencement of Danelaw imitation, the possibility therefore exists of a significant gap between the two issues. The start of the *Two-Line* coinage could perhaps have filled it, since two *Cross-and-Lozenge* moneyers associated with London – Ealdwulf and Hereferth – are known for that type, as is Tilewine. On the other hand, as has already been mentioned, regular *Monogram* and *Two-Line* pence were struck to a heavier weight standard than *Cross-and-Lozenge*, implying a metrological reform of the coinage that might or might not have followed a gap in minting after the *Cross-and-Lozenge* issue was discontinued. At all events a gap between the *Cross-and-Lozenge* and *Monogram* issues, whether or not filled by *Two-Line* coins, might enable the *Monogram* type to be viewed, as in the past, as marking some notable event in the 880s connected with London.

Professor Keynes, discussing King Alfred and the Mercians, takes the *Cross-and-Lozenge* issue as clear evidence that the Danes were not in control of London in the 870s. He argues that when the kingdom of Mercia was divided in 877 between English and Danes, London did not fall under Danish control. After Ceolwulf's demise Alfred was able to assume authority over 'English' Mercia, gaining the submission of Æthelred, the new ruler of the Mercians, to whom he married his daughter Æthelflæd. In 883 a Viking force descended on London, presumably establishing themselves in the walled city before being ejected after a siege. But in 885 another Viking force entered the Thames estuary, and in the following year Alfred decided to 'occupy' the city and secure

its defences, relocating within its walls the existing commercial settlement to the west of the Fleet.

On this view, what special occasion could the *Monogram* issue have marked? We do not know whether before 886 London's moneyers already operated within the walls, but if the presence of the *Cross-and-Lozenge* weight in St Paul's Churchyard points in that direction the Danish occupation of 883 would have been likely to disrupt the production of coinage. Blackburn points out that the only hoards from the last quarter of the ninth century found in or near London were deposited during the currency of the *Monogram* issue and could therefore have been associated with the siege of 883. That would, of course, preclude the issue having marked the end of the siege, still less the restoration of the city in 886. It would have begun before 883 and would perhaps have been intended as a proclamation of Alfred (not described on this issue as king of the Saxons) as undisputed overlord of the principal town in Mercia and, indeed, in the land.

This is a volume that should be on the shelves of everyone interested in Anglo-Saxon coinage. It is well produced and the plates are quite acceptable given the diversity of the sources from which the photographs were obtained. A few small errors have escaped detection: for example London was latinised as *Lundonia*, not *Londonia* (p. 73); in the source quoted the Dorking hoard of 1817 is given a date of deposit c.862, not c.857 (p. 80); on Plate 10 the obverses of nos 59 and 60 have been transposed (see above).

The editors are to be congratulated, not only on their own contributions but also the complementary articles they commissioned from the other authors. We can now look forward to a definitive publication by Dr Blackburn of the *Two-Line* types that constituted the coinage of the second half of Alfred's reign. This reviewer hopes it will restore to near the end of the reign the non-portrait *Oxford* type of the moneyer Bernwald, which in this volume, on the evidence of an ill-recorded find in about 1880 from Thames Street, London, has been aligned with the *Gloucester* and *London Monogram* issues.

STEWART LYON

REVIEWS

Thrymsas, Sceattas and Stycas of Northumbria, by Elizabeth J.E. Pirie (= *Northumbrian Numismatic Studies* 2) (Llanfyllin (Gallata), 2000). 92 pp., 18 maps, 3 tables, many coin photographs in text.

A welcome addition to anybody's reference library. Elizabeth Pirie's *Thrymsas, Sceattas and Stycas of Northumbria* builds upon the earlier *Coins in the Kingdom of Northumbria* (1996). Not only adding to the inventory of coins recorded to 1986, this study refines some of the earlier interpretation without compromising the user-friendly format. The study is divided chronologically into thrymsas and early sceattas, later sceattas and stycas. It is then arranged geographically, making it very easy to look up known find-spots by the type of coin and by parish. The fact that material from excavations is put alongside metal-detected finds and that neither category is examined in isolation is what really makes the inventory so refreshing.

The addition to the coin list of two appendices is the other aspect of this study which really makes it stand out. The first of these deals with the 'Carolingian Connection', the second briefly reviews stycas weights. The appendices provide both historical context and interesting conjecture. More importantly, for those of us working with finds of other periods too, Pirie gives an invaluable frame of reference.

The only major criticism of this publication that I have concerns the unhelpful comments made by Pirie about the voluntary reporting and recording of non-Treasure finds through the 'Finding our Past' project. It is a shame that Pirie has made so much of the problems of false provenance and not more of the fact that there are people working very hard to overcome exactly this problem by gathering more and truer details of non-excavated finds than has ever been possible before. Surely the point is that we all have a common cause, namely recording more of what is out there. Any record is better than no record at all.

I look forward to seeing Pirie's next inventory to see how, or if, finds recorded after 1997 alter this picture of Northumbrian coinage, especially in the wake of increasing numbers of recorded metal-detector finds. Until then, I will certainly be using this study as my reference work for comparative Northumbrian material, and with much appreciation. I would not hesitate to recommend it to anybody working on this type of material.

CEINWEN PAYNTON

An Atlas of Anglo-Saxon and Norman Coin Finds 973-1086, by D.M. Metcalf, Royal Numismatic Society s.p. 12, Royal Numismatic Society and Ashmolean Museum Oxford (London, 1998) xvi + 309 pages.

Michael Metcalf is one of the most stimulating scholars currently working on medieval coinage and currency. His work is always challenging and innovative. This book is no exception. It is full of detailed information, often connected in a quite novel way to shed light on problems that might have been thought insoluble. The questions he poses of the material are in themselves thought provoking, and Metcalf, the teacher, takes pleasure in sharing with us his thought processes, step by step, as he considers a problem and explores various alternative approaches, explaining why some are unprofitable but others successful. This book will be a stimulating read for those interested in methods of interpretation, whether or not they are concerned with medieval England.

An image I particularly liked was one he invoked to convey the wealth of detailed information the late Saxon coinage can offer. With thirty-one consecutive types struck at upwards of fifty towns, the coins can be spread across a grid containing more than 1,500 boxes, and he invites the reader to imagine building columns on top of those boxes with heights varying according to the number of surviving specimens of each mint for type. It conjures up an image of Manhattan sprawling for miles in every direction. It would be quite something to actually build this as a three-dimensional model. However, the model becomes quite impossible to construct physically if one goes on to incorporate data based on the estimated production at each mint, rather than coin survival, and the occurrence of the various types and mints in hoards and single finds, not to mention weigh standards, moneyers or die-cutting styles. It is all too easy, with such an excess of detailed information, to get stuck looking at the trees and never see the wood. Yet it is precisely this body of data that Metcalf takes pleasure in exploring both in the round and burrowing deeply into certain aspects.

Not only are some of the ideas and approaches in this book novel, even its structure is unconventional. It is divided into three main sections, each about a hundred pages in length. The first consists of a series of thirty-nine interconnected questions which the author poses and then proceeds to answer, drawing in part on the reference material presented later in the book. The second section considers the coinage chronologically, issue by issue, looking at features such as the dating, the hoards and single finds, weight standards, and the number of mints active in each type. The third section takes a geographical view of the coinage, region by region, focusing on the mints and their relative output and on the pattern of coin finds. The

actual Gazetteer of finds is relatively short, twenty pages, and forms effectively an appendix to the main work. The second and third sections are essentially for reference, to be dipped into, while the first has to be read as a narrative since the arguments deployed in one answer are often developed in another.

The title does not do the book justice; a more informative, if duller, name might have been 'Aspects of Coin Production and Monetary Circulation in the late Anglo-Saxon and Norman periods'. Quite reasonably, the intended audience is principally historians and archaeologists rather than numismatists, and the thirty-nine questions have been chosen to address topics of wider historical interest. As Metcalf explains in the Foreword, this is a book about monetary history and 'not one about everything we know about late Anglo-Saxon coinage'. But whether it succeeds in helping historians as it intends I am rather doubtful. The structure is really too complex, and there is too little internal cross-referencing or citation of other literature, with the result that it is often unclear what is new and what is derived from other works. For those with a reasonable knowledge of Anglo-Saxon coinage the arguments can be followed, but too few historians would be in this position and some may at times find themselves lost. More could usefully have been said at the outset about the coinage, for example a succinct statement of the achievements of Edgar's coinage reform, and the purpose of the periodic recoinages, at least in so far as we can discern them (a discussion in the Conclusions, pp. 280-2, is not indexed). Also, the book could have been more readily used for reference later if it had been arranged in chapters by topic, rather than in the form of questions and answers, many of which are very specific.

These are quibbles over presentation, but in terms of substance there is so much that is novel that one can only mention a few topics. One of the main conclusions is that the Anglo-Saxon coinage was produced in large quantity and was used widely, even in rural areas. In most parts of England coins of the local mint are in a minority, and the velocity of circulation within and between regions was impressive. The exception is Yorkshire, where, because of its isolation, more than three-quarters of the single finds are coins of the York mint. It is gratifying to see how much the find data has grown since 1980, when Metcalf first explored these issues in his 'Continuity and Change' article in this *Journal*. Then there were some 260 single finds of the period c.973-1086, compared with nearly 700 in Metcalf's present study, or 914 now registered on the *EMC Database*. Expanding on the 1980 statistics for the Ranking of the Mints, which were based on the relative number of coins of each mint and type in Scandinavian collections (17,000 coins), Metcalf here compares them with the proportions found among English single finds. Even though these are now much more plentiful, c.700 finds (or 588 with mint attributions) is too small a sample to spread over the grid of 1,500 boxes if one is to attempt to rank the mints within each type. The best that can be done is to amalgamate all types, and show that the results are in broad agreement with the Scandinavian ranking. We know, however, that over the hundred year period some of the larger mints changed their position, while smaller mints came and went. At present, until we have more die-studies of mints available, we have to rely on the

Scandinavian data, even though in reality that is no more than a measure of the composition of the coinage exported to across the North Sea.

Another fundamental topic is the variation in weight standards within each type. While there is a general stepped decline in the standard in most types, the pattern is proving to be much more complicated than was originally thought (pp. 56–66). There are undoubted variations between regions, mints and even moneyers, but it is difficult to know which issues are contemporary at different mints or between different moneyers. Recognition of developments within die-cutting styles can be a useful tool in dating, if used with care, and Jonsson's discussion of the styles and weight pattern in the Reform Small Cross issue (*New Era*, pp. 95–100) suggests a more orderly arrangement than Metcalf implies (pp. 66–9). If discerning the patterns is difficult enough, understanding the system that lay behind them is still more bewildering. Metcalf argues that we are simply unable to offer a reliable interpretation (pp. 280–1) – there are too many unknowns – though he does float the idea (p. 69) that where dual standards operated, the choice may have depended on the ownership of the metal being minted, whether royal or private.

Particularly welcome is what must be the first discussion in depth of the practice of cutting coins to make half-pennies and farthings (pp. 76–84). Metcalf addresses the thorny question of whether the cutting was done at the mint or in the market-place, by comparing the distributions by mint and by type of fractions and whole coins, hoping to find some anomalies that could suggest that the cutting of coins was subject to the whim of administrators. Unfortunately the number of fractions on record with secure mint attributions is still only 93 for the period c.973–1086, and these have a broadly similar mint profile to the coinage in general, although there seems to have been a decline in the ratio of cut to whole coins after the Norman Conquest. The evidence is not decisive, but taking account of other factors he inclines to the view that most of the fractions were cut in the mint. This is reinforced by Kristin Bornholdt's recent work showing that cut fractions were virtually unknown in England before Edgar's reform, and their introduction was evidently a deliberate policy. Here, as elsewhere, Metcalf has set an agenda for future research, and I hope that we may take forward these ideas with the help of the collection of the late David Rogers (now made available for study by Paul and Bente Withers), which almost doubles the material previously available.

The volume concludes with a short bibliographical guide (no substitute for proper footnotes!), and a statistical appendix which updates figures for estimated mint output published in 'Continuity and Change', though one has to refer back to the article to understand them. Finally there are three plates of line drawings illustrating the coin types which contain some unfortunate errors: Æthelred's First Small Cross is of Last Small Cross type, the Last Small Cross is a Crux/ISC mule and Cnut's Quatrefoil type is a Scandinavian Quatrefoil/Last Small Cross mule.

This volume offers a rich feast for anyone concerned with the late Anglo-Saxon and early Norman state. Those unfamiliar with the numismatic evidence and with Michael Metcalf's work, may be surprised at the range of

issues he has managed to address. By their nature, they are at the cutting edge, and the interpretations are often speculative. But as the evidence continues to grow, we will be able to test and refine the proposals, and so gradually move towards a more secure understanding of the economy of the later tenth and eleventh centuries.

M.A.S. BLACKBURN

The English Mark. A History of the Mark, Marke or Marc, an English 'Currency of Account' from Domesday to the 18th Century and Possibly to the 20th by John Bauldreay, 34 pp. Published by A4 Media Services

There has been a gap in our literature, in that we lacked any work on the mark, and the author deserves our gratitude for supplying one which is compellingly readable. It contains many interesting contemporary quotations and examples, of various kinds, but never so numerous as to become boring. The theory that the mark was used by upper-class people and pounds and shillings by the lower orders will not be accepted by all, but it is a fascinating suggestion. The reviewer would tend to see money of account as not so much a separate system from the coinage, but rather as the total system of value, part of which is represented by coin and part not. It is true that we tend to refer to the pound and mark as units of account only, until inflation and increasing commerce make it practical to strike coins of those values. These developments do not really change the system, but only the way settlement is made. Even today we do not have a £1,000 note, but have no difficulty in thinking of £1,000 as a kind of unit, and we sometimes call it a 'K'. As the author says, different sources give varied dates for the making of particular denominations, and one could go on for a long time about this but it would be quite inappropriate for a booklet of this type.

These considerations however, simply make this slim volume more stimulating, and it is recommended for all who are prepared to look at our coinage and the way it was seen at the time, from a slightly different but more interesting angle.

A.J. HOLMES

English Pattern, Trial and Proof Coins in Gold 1547–1968, by Alex Wilson and Mark Rasmussen. (Alexander Publishing, 2000). 537 pp + some 400 text illustrations.

It has been a long gestation period for Alex Wilson and Mark Rasmussen's book on the proof and pattern gold coins. Now it has finally arrived, in its detail it is rather disappointing. It is highly priced at £85 and weighs, incredibly, just over 4 lbs or 1.83 kilograms. To put it another way, each of the 456 entries cost nearly 20 pence and weighs 4 grams. The reason for this soon becomes obvious for each of the 456 entries (WR nos) has a separate page, 'to fill the book out', one understands. When a 1911 proof set is allotted 4 pages, it certainly does that. Page 347 contains 33 words including reign heading and page number, and many other pages contain little more. What this book does do is to illustrate every piece (where possible), providing an invaluable work of

reference, for the illustrations are very good, but even good illustrations can have their limitations.

At the top of each page is the illustration, below is the reference number, denomination and date, obverse and reverse type and legend (for the hammered issues stops are omitted, for the milled issues sometimes inconsistent), mint mark and edge where applicable, weight in grams and rarity guide on a scale of 1–7. This reviewer would have liked to see weights given in grains as well, for the coins were struck to a grain standard and when checking to a previous work of reference, the weight will be given in grains. WR 14 at 3.45 g 'is 10 grains heavier than usual'. Enough said.

At the bottom of each page below an 'exergual line' (above for WR 166) one is given a reference to an earlier work or sale catalogue, or the location of the specimen illustrated, especially if only one or two are known. One is sometimes confused as to what is actually meant.

A major omission is that no die identities are given. Do WR 42–44 share the same obverse die and WR 108–110 have the same reverse die? One could pose very many such questions. We know some pieces are from the same dies but with different edges, and so have a different WR number and thus a separate page, but page by page we are not told. WR 4 is MI 3, but a similar piece, MI 4, is not listed. WR 3 is MI 5 where two varieties of legend are noted, as is noted for MI 6 (WR 7). WR 3 is noted as 'Struck *en medaille* from crown dies' This appears to be meaningless until one realises that half-sovereign dies (WR 6) is meant. Also, WR 3 reverse is from the same die as WR 4 obverse.

There are inconsistencies and errors aplenty. To mention a few (and only a few): personal names, such as engravers and provenances vary in presentation and some are inaccurate, e.g. Locket (WR 2) and Dr E.G. Carter (WR 35); the style of reference to NC, BNJ and others varies considerably: inscriptions on the coin appear in lower case (WR 164, 173); WR 8 reads FIDEI; PART ONE (p 223) should read PART TWO; Bequest (WR 52) is Donation (WR 291); WR 213 and 214 should read IV, not VI: often British Museum Collection should read British Museum Catalogue (WR 52, 53), giving rise to "Hunterian Museum ex British Museum Collection 442 (WR 56) – surely time for the Keeper to have a diplomatic word with young Bateson!; Rarity 1 for R (WR 130); *semée* for *semée* (WR 69); fine gold is actually pure gold, i.e. 1000 fine; where is the scroll ornament (WR 110) or has it strayed from WR 108?

The weight of the George III shilling 1816 is 7.98 grams.

The Banks Catalogue (WR 99) is not listed in the Select Bibliography and would it not been useful to give Eimer references to the Pingo pieces (WR 54 is not listed by Eimer).

Proofs and patterns in gold are not met with every day and only with regular usage will additions and corrections be made. The reviewer admits to not having checked specialist papers in BNJ by the likes of Lessen and Dyer. A surprising omission is Seaby 3804A, a George IV proof half-sovereign, 1826, with extra curl.

What would have been most useful would have been a comprehensive concordance, say, with Montagu, Douglas-Morris, L & S/ ESC/ BMC, British Museum and Others, and perhaps a complete list of auction sales quoted. Undoubtedly the work will become the standard

work of reference for the series, niggling inconsistencies and shortcomings (and high price) or not. What the book obviously lacked, rather surprisingly in view of the professional status of the authors, was a numismatic editor and publisher. Any experienced proof reader, in the reviewer's case of auction sale catalogues, could have so easily made it a much more competent piece of work without too much effort.

P.D. MITCHELL

Sylloge of Coins of the British Isles, 49: The Norweb Collection, Cleveland, Ohio, U.S.A., Tokens of the British Isles, 1575–1750. Part VI Wiltshire to Yorkshire, Ireland to Wales, by R.H. Thompson and M.J. Dickinson (Spink and Son Ltd., London, 1999), lxxi + 260 pp., 43 pls.

With the welcome publication of this, the sixth volume in the series, Thompson's and Dickinson's coverage of the English trade tokens in the Norweb Collection is now nearing completion. The present volume covers the tokens of the counties of Wiltshire, Worcestershire and Yorkshire. In addition, the Irish, Scottish and Welsh tokens in the collection are catalogued, as are the issues of the Isle of Man and Sark.

The new volume adopts a familiar format, with details of weight (in grams and grains), metal, issuer and die axis being provided for each entry. Williamson references are also provided, as are details of provenance and in many instances other notes. Obverse and reverse designs or types are described through reference to a classified index, with type 5.14.136, for example, being described as 'On a shield three pears: cf. the "modern" arms of the City of Worcester *Argent a fesse between three pears sable*' (Briggs 1971, p. 422). The use of such a standardised shorthand has allowed the authors greatly to reduce the bulk of the text in the catalogue section of the work and, although the system seems initially to be clumsy and to require the reader to make continuous cross-references between the bulk of the descriptive text and the classified index, it can nevertheless quickly be mastered.

As a record of a single collection, the coverage cannot be fully comprehensive. This is freely acknowledged by the authors in their preface, wherein the coverage of Wiltshire is described as 'fairly comprehensive' and that of Worcestershire as 'reasonably strong'. Yorkshire, we are justly informed, 'is superb'. There is much to be gained to from the fresh coverage of the tokens of Ireland contained in this volume, and this particular section benefits greatly from the inclusion of Thompson's well-researched essay on Sir William Petty. The coverage of the Welsh tokens (including those of Monmouthshire) mirrors that previously undertaken by George Boon, whilst the coverage of the Isle of Man and Scotland is of necessity restricted to the single rare types issued there. Of great interest is the reattribution of two types of octagonal tokens to the island of Sark.

On a practical level, it is the inclusion of comprehensive indices and legible photographs which make this volume such a valuable addition to the collector's or curator's bookshelf. As anyone who has had the experience of attempting to identify metal-detector finds with the assistance only of Dickinson and Williamson will concede, the opportunity to compare a well worn and

corroded token with a photograph of a well preserved specimen of the same issue is a positive godsend. That having been said, it is probably fair to warn would-be readers that many of the tokens illustrated are themselves worn and, in some cases, the level of surface damage has defeated the best efforts of the photographer to produce a clear and readily usable image of the piece in question. That notwithstanding, the volume represents not only a worthy piece of scholarship but also a practical and generally user-friendly aid to both curators and collectors.

CRAIG BARCLAY

Royal Commemorative Medals 1837–1977, vol. 4, *King Edward VII 1901–1910* by Andrew Whittlestone and Michael Ewing (Coins of Beeston, 1999) 192 pp, 1289 ills, in text, laminated card covers, £20.

This, the fourth and latest book in the projected series of eight volumes covering a prolific period of medal making in Britain reflects this by cataloguing just under a thousand medals concerning Royalty issued during the reign of Edward VII. Of these, 31 commemorate the Accession in 1901 and 698 mark the coronation in the following year. That the medal manufacturers produced such a prodigious number of different medals on this latter occasion is some indication of the joy with which this event was greeted and the popularity of the King. Further evidence of this comes from the fact that the Royal Mint alone manufactured and sold 141,310 examples of the official coronation medal in gold, silver and bronze in four different sizes.

All of this information and much else besides can be gleaned from this latest volume which also lists medals struck to commemorate other events such as visits to Glasgow, Edinburgh, Richmond in Surrey, Ireland, Austria and Midsomer Norton in Somerset. The royal tours to the Colonies, the investiture of the Prince of Wales, the opening of various exhibitions and other miscellaneous medals connected with royalty are also catalogued, including, particularly, those struck for local authorities and issued with means of suspension, this latter category being deliberately omitted from BHM.

The catalogue is arranged in chronological order and the medals numbered consecutively with the first digit, No.4 representing the volume number. Different reverses for each medal are listed where applicable and are numbered as rev. A, B or C etc. Where a medal was struck in a variety of metals and sizes these too are given with an estimate of their retail price.

Thus it will be seen that a great deal of detailed work was required to bring the book to publication and the authors are to be congratulated for persevering.

It is inevitable in such a work that some errors or faults should slip through but these are few and hardly detract from the value of the catalogue. One in particular, however, should be corrected here to avoid confusion: No. 4205, reverse HH does not, as listed, commemorate the coronation but the Coronation Spithead Review which took place on 16th August 1902. The date 28th June 1902 shown on the medal was that originally intended for the Review, which was postponed due to the King's ill health.

The description of the very rare medal struck to commemorate the visit of Princess Henry of Battenberg to the

Royal Mint (No. 4884) could be improved upon by the authors noting that the obverse was struck from the crown coinage die.

In common with the preceding volumes, the reproduction of some of the illustrations is rather poor; indeed, in a number of instances the detail is missing completely. Perhaps in future volumes a more rigorous quality control could be exercised. The difficulty probably lies with the quality of the paper and the method of printing rather than with the photographs, the majority of which were taken by Andrew Whittlestone.

There are five indexes: medals of uncertain attribution; makers, designers, die cutters and publishers etc; general index; registered design numbers and, finally, an index of obverse legends. These are an indispensable part of such a work although the index of makers, designers, die cutters, publishers etc is perhaps the least likely to be used since the alphabetic arrangement of these people within a particular event is perfectly clear.

Four volumes remain to be completed by the authors; the first, Medals issued during the reign of Queen Victoria excepting those struck for the two Jubilees, will no doubt prove to be the most daunting. It is to be hoped that work is proceeding apace and that the volumes will not be long delayed. If the succeeding volumes maintain the standard of those already in print; the authors, on completion of the project, will be able to feel justly satisfied with the completion of a long and perhaps tedious, but very worthwhile project.

LAURENCE BROWN

Scottish Currency, by The Multimedia Team, National Museums of Scotland (Edinburgh, 2000). CD-Rom (for Macintosh and Windows). £29.99.

World Of Money, by British Museum Multimedia (London 1998). CD-Rom (for PC/MAC). £24.99.

Once inserted, the National Museums of Scotland CD-Rom is exceedingly easy to use and a couple of clicks brings the reader to the main menu where there is a choice of four topics: introduction, coins, tokens and banknotes. The introduction is short, consisting of an illustration and concise paragraph on five aspects of the Scottish coinage – early issues, mints and moneyers, designs, values and its end. There is a further note on tokens, and also two on banking in Scotland.

Moving to 'Coins', the menu consists of a linear chronology from 1100 to 1800 which, when dragged upon, moves a second bar with the contemporary monarch's name. Clicking on the name takes one into the coins of that reign. Each reign starts with a historical resume accompanied by a portrait from a coin and is followed by a numismatic synopsis along with its coin reverse. After come the coin entries, ranging from a pair for Malcolm IV to over sixty for James VI. Somewhat over three hundred coins from David I to Queen Anne are described and illustrated.

Each coin record consists of an illustration with a description beside it and a number of details below. The description includes a transcription of the legend and a translation. The details consist of the type, date, value in £ Scots, mint, weight, size and the National Museums of Scotland registration number. All the major issues are

covered giving a comprehensive view of the Scottish coinage.

The specimens illustrated have been carefully chosen and the images are of excellent quality, though some towards the end of the series are somewhat dark. One side is displayed at a time and a quick click of the 'Flip' function spins the coin over to show the second side; at the same time the description also changes though the details remain. The normal size image is very good, but a 'Zoom' function allows an enlarged image to fill most of the screen. This permits an enhanced examination and enjoyment of the coins, especially such rarities as the Francis and Mary ducat. The light issue groat of James IV wearing a beard is most striking. Equally the legends on the earlier medieval coins can be better seen and understood and small coins such as the 15th-century bill on pennies, the copper of James III and the first period pennies of Mary gain much from this facility, which to check detail on any of the coins included is extremely useful. Such complete enlargement would make a book prohibitively expensive.

The descriptions are full and it is helpful to have the legend given beside the coin, especially with those specimens where it is not fully clear. Likewise the accompanying translation saves time checking a list. The translation of *Scottorum* as 'of the Scots' rather than 'of Scots' sounds slightly odd and jars in the case of Mary. All necessary details are included. A slight quibble may be that the weight is rendered only in grams and not also in grains. Also the 'Type' is somewhat inconsistent in the information given. This ranges from a Burns reference, sometimes a Stewart reference, other references, coinages, issues, periods and so forth. Thus the four short cross pennies included have 'third coinage' for the two of William I, 'Stewart a' for that of Alexander II and 'Short Cross' for the Alexander III example. Equally the term 'long cross' is not given to the two Alexander III specimens of Edinburgh and Berwick which follow. Of minor note, the first short cross penny of William I should have 'minted: 1195-1205' not 1245. Also all the Robert III coins, of both the heavy (1390-1403) and light coinage (1403-1406) are dated 1390-1406.

Overall there is provided a very comprehensive survey of the Scottish coinage over the six hundred years of its issue. Texts are brief but concise, interesting and informative. The images are of top quality and are accompanied by a wealth of description and detail. This section is particularly successful.

The 'Tokens' section is rather brief being confined to an introduction and only fourteen late 18th-century half-penny examples. Each can be viewed by clicking on the appropriate name of one of the major towns and cities indicated on a map of Scotland. Most of the images seem darker than they should be but are accompanied again by full descriptions and details, which include manufacture and a Dalton and Hamer reference. There is an additional 'History' function which provides a brief background to each token.

The third section deals with 'Banknotes' and provides a good introduction to their issue and development in Scotland with some thirty-five specimens, divided into three groups: pre-1800, 1800-1900 and post-1900. The images are very good but generally are better looked at using the 'Zoom' facility because of their size and fine

detail. The 'Flip' facility is provided only for the later notes printed on both sides. The image is accompanied by the name of the issuing bank and the denomination with details below consisting of date, type, size, NMS registration number, engraver, and signatures. The 'Type' throughout gives a reference to the excellent and standard *Scottish Banknotes* by James Douglas. The 'History' facility is not provided for the banknotes, which is a pity for there is much of interest which could be added. Also the number of 20th-century notes included, merely six, is disappointing.

However, for those with the technology and an interest in numismatics or history this CD-Rom will appeal greatly. It is to be hoped that other specific areas of the subject will soon also receive such admirable treatment.

The British Museum's *World of Money* CD-Rom is a much more ambitious and complex project covering all aspects of money and accompanied by sound, video, printing and games. Again it is very successful in both its content and ease of use. The opening image of the facade of the British Museum is followed by one of the foyer with the sound of the hustle and bustle of visitors and a notice-board. This offers directions to the History of Money, Information Centre, Activities and Options.

'Options' ranges from a Bibliography to an Index and includes a Glossary and Galleries. The inclusion of a comprehensive bibliography is useful. However, the main standard references on ancient coins such as *BMC*, *Crawford* and *RIC* are not included though *Oriental Coins in the British Museum* is. The only work relating to Scotland is Checkland's *Banking in Scotland: A History*. There is no sign of Burns or Stewart – nor indeed is North listed. The Society might quibble at the inclusion of the *Numismatic Chronicle* but not the *British Numismatic Journal*. However, for the most part someone wishing further reading or greater detail will be well served.

The Glossary, too, is wide-ranging and on clicking the desired word a succinct paragraph appears. The Galleries, of which there are seven, initially present a set of up to forty images. After selecting a Greek, Roman, Chinese or other coin, an enlarged image appears with text. A further enlargement is accompanied by basic details of the coin. On the images in general the basic ones are often quite small and of mixed quality, but the enlargements are excellent and many quite superb. Zooming in and out is easily and quickly accomplished by the use of a magnifying glass icon. Another icon allows an easy return to the Options board.

The core of the work is the 'History of Money' which is accessed by highlighting the required letter of the alphabet and then scrolling through its contents. This section contains a huge amount of information which is well presented and illustrated – not just with coins though there are ample numbers of these. The letter A alone gives a good idea of the range of material included. Over 120 listings include Athens, Alexander the Great and Augustus for the Ancient World. Africa is well covered as is Australia; so too are archaeology and art; nor can one omit ant-nose money (a variety of Chinese bronze cowie) or Aquinas (medieval economic thought).

Augustus has three entries, the main one 'Augustus, emperor' having five pages dealing with background, portraiture and propaganda. 'Augustus, accounts of empire',

however, is merely a small reference to Augustus within 'Greek and Roman Economy' while 'Augustus, Cistophoric coinage of' refers to one issue in 'The Attalids and Cistophori', but the latter is well worth looking at since it is an excellent summary of the introduction and development of this type of coin. One of the good aspects of this project is that one coin, one topic, leads to a related one and then to another, and another. It is at times almost overwhelming, and occasionally one can get lost, but generally it provides a fascinating journey through numismatics.

There is no indication when the 'Introduction' is searched whether the entry has a section to itself or merely appears briefly in one covering a related topic. The reviewer thought it might be interesting to check for Scottish coinage to see how this is dealt with in comparison to the NMS CD-Rom. It isn't. There are three entries relating to the establishment of the Bank of Scotland, modern Scottish paper money, and the Viking-age Scottish economy but none is a topic in its own right. The last is part of 'The Viking Kingdoms' but neatly sums up the use of coin in Scotland at that time with reference to ring-money and the Skaill hoard. There is an excellent image of ring-money from that hoard, but the map icon merely repeats the map of Anglo-Saxon England.

Most of the Irish coinages are omitted with only one entry 'the earliest coinage'. This takes the viewer back again to 'The Viking Kingdoms'. There is a good image of a Sihtric crux penny of Dublin but the map is again only of Anglo-Saxon England. Medieval English coinage fares no better, however, with the nine England entries consisting of five Anglo-Saxon, two Civil War and two banking.

On a lighter note there is also an 'Activities' or games section. The reviewer is not a fan of computer games but showed willing. 'Treasure Ship' involves sailing across the sea to bring home the treasure through a variety of

obstacles, but generally the reviewer did not get very far before being looted and sunk by the pirates. However it is fun to fire a broadside and on at least one occasion the pirates were sunk. 'Budget Power' is a test of spending government income wisely in order to balance the budget while 'Pig Fortunes' is basically a multiple-choice quiz based on the contents of the World of Money. 'Money Gallery' is a visual quiz whereby the jumbled contents of numismatics case have to be re-united with their labels, twenty minutes before opening time. 'Money Maker' gives wide scope to design a coin, banknote, cheque or credit card. This section is actually quite enjoyable but it depends much on subjective taste and may appeal more to the younger viewer.

The other main section is an 'Information Centre' which is about the making, use and saving of money. The viewer is first presented with a lift door with appropriate floor buttons. Pressing B takes one to the entrance of a mint, 4 a Coin Room, 3 a bank. The Coin Room deals with the 'Study of Money' by numismatists, historians and archaeologists, and their various methods of research. Hoarding is dealt with in 'Saving Money' and the art in 'Money and Society'. The manufacture of money is well dealt with and includes a blank moving of its own accord to the die, a hammer blow and the exit of a finished coins. There is much of interest here, well illustrated with a mixture of coins, drawings and various art-works.

Both CD-Roms have much to recommend them and are well worth viewing. Great advances are being made in this direction and it is good to see two of the major institutions at the forefront of such technology. That they have done so well, both technically and curatorially, is a matter of congratulation. Not only will these be of interest to collectors but to a much wider audience and, hopefully, will engender an interest in coinage, especially among younger parts.

J.D. BATESON

ROYAL MINT ADVISORY COMMITTEE ON THE DESIGN OF COINS, MEDALS, SEALS AND DECORATIONS

His Royal Highness Prince Philip, Duke of Edinburgh, retired as President of the Royal Mint Advisory Committee at the end of 1999, thereby bringing to an end a remarkable period of service to the Committee extending over no less than forty-seven years.

He attended his first meeting on 21 March 1952 and was at once fully involved in the important task of selecting coins for the new reign. Thereafter he attended meetings of the Committee with punctilious regularity, dealing with new circulating coins and official medals, commemorative coins and government seals. But probably the greatest demands were placed upon him at the time of decimalisation, when he skilfully guided the Committee

towards the adoption of the series of reverse designs still in use today.

The work of the Committee in examining and selecting designs for the coinage will undoubtedly be a source of study for future generations of numismatists. It may therefore be of interest to reproduce below the text of the speech delivered by John Porteous, OBE, a member of this Society, to the Committee and distinguished guests at the lunch held in honour of His Royal Highness at St James's Palace on 24 November 1999. It was an unenviable task, which fell to Mr Porteous as the longest serving current member of the Committee but which he accomplished with characteristic style and wit.

SPEECH BY JOHN PORTEOUS AT THE FAREWELL LUNCH FOR HIS ROYAL HIGHNESS, THE PRINCE PHILIP, DUKE OF EDINBURGH AT ST JAMES'S PALACE, 24 NOVEMBER 1999

Your Royal Highness

This is a very festive lunch but it's a sad occasion for us at the Royal Mint Advisory Committee, since it brings to an end your forty-seven years as our President. During that time, Sir, you have been the captain and not the figurehead of our vessel. It says on our cards that you have missed four meetings. How, Sir, you can reconcile that with your conscience I don't know, but if it's any comfort to you I can plead in mitigation that you have attended every single one of them where the substantive coinage of the realm was under consideration. Moreover, you have brought to the Committee an expertise of your own; because you are the only single one of us who has ever had the least idea about what servicemen would like to see on their campaign medals. So for nearly fifty years you have been the Royal element in the Royal Mint.

You have brought to us, to our Committee, an extraordinary range of remarkable members and the first that I should mention perhaps is Kenneth Clark. Not Kenneth Clarke, you understand, who was Master of the Mint about three years ago. Ex-Masters of the Mint, in fact, are today two a penny with us. (I use that term, two a penny, in the old-fashioned archaic sense in which it was used by minting and coin people to mean of very great value and price!). No, I mean of course Kenneth Clark, the art historian and connoisseur who, once he had pronounced a design good or bad, none of the rest of us, except perhaps yourself, Sir, ever dared to gainsay. And then there was John Betjeman, who in a single, drawling, apparently off-hand phrase, could turn the whole Committee in an instant from one opinion to another. There was Peter Scott, who,

Sir, could vie with you in delineating the curve of a roan antelope's horn or the cut of a kittiwake's wing, and Anthony Wagner, the most learned of heralds, who you used to tease, Sir, for the fierceness with which he used to impose the disciplines of his calling. We had Elisabeth Frink, a woman of as strong and fine a character as her sculpture. We had Marina Warner, who stirred us all up, and we had Shirley Anglesey, who calmed us down again and talked more sense than almost any of us. And I must mention with some sadness today two other members of our Committee, John Hale and Hugh Casson, whose characters and minds enormously brightened our deliberations over many years.

But it has been you, Sir, with your experience of negotiating in the highest levels of the State who has enabled us to make our proposals as a Committee stick. Because we are only an Advisory Committee and yet we deal in the emblems and symbols of high politics. I could give you an example of this. For some three hundred years our coinage was imbued with the symbols of Union, but in recent years we have begun and our Committee has been forward in handling the symbols of devolution with the £1 pieces, one for each of the constituent parts of the United Kingdom, where, under your careful guidance, we have worked to provide designs which were correct without being pedantic, historically charged without being aggressive, and which have avoided, as far as we could, what I think of as the sentimental *Braveheart* school of ignorant nationalism. With you we have also examined the delicate problem of a design for Northern Ireland, where the symbol, as so often, has been part of the problem rather than part of the solution; and we eventually lighted, very



happily, on the solution of the flax flower or linen flower, which, since we adopted it for coinage, has now, I understand, been adopted as the emblem of the Northern Ireland Assembly.

But of course above all it's in the field of the effigies of Her Majesty the Queen that your influence has been most pervasive and where you have reconciled with great skill, if you will allow me to say so, the conflicting roles of Consort and Chairman of a dispassionate and independent Committee. Her Majesty has been graciously pleased to allow four effigies. The first Queen Elizabeth only had one because her advisors never dared present her with another one after the accession portrait. And I believe that the four have in their different ways satisfied and in some instances delighted public opinion and that our coinage, thanks to Your Royal Highness's interest and care, now stands worthily in our historic tradition and will not disgrace us when, two or three millennia hence, it is virtually all of us that remains.

I began by saying, Sir, that you were the captain of this ship and not its figurehead and I don't believe that anyone in this room would believe me if I declared that we had never heard the bark from your quarterdeck. We Committee members have, for our part, been pretty adept at massing on the fo'c'sle, or whatever it is that mariners are said to do on these occasions, bravely forming up, as often as not, behind one of our female colleagues. Palaces have ante-rooms and committees sometimes wait in them and I once heard one member say to another, 'Say what you think, he cannot have your head cut off'. Well, in fact, I must say that when I first joined the Committee and we used to meet in the rather grand Tapestry Room through there – I think the Tapestry Room but anyway it had the air of a sixteenth-century Privy Council chamber – I sometimes wondered whether perhaps you could and that perhaps the arras might part and a pair of Yeomen of the Guard come to haul one of us off to the Tower.

In fact, you did produce a *coup de théâtre* on one occasion but it was of a very different order. We were consid-

ering, Sir, you may remember, the coinage of the Seychelles and we were looking at some drawings, rather dull drawings it has to be said, of the proposals – the usual thing of palm trees, some birds and fish, a coco-de-mer. 'Wait!', said Your Royal Highness, 'I don't believe that a single one of you has ever seen a coco-de-mer'. And from a briefcase, a bulky briefcase under the table, you produced the most exotic, erotic, innocent and suggestive object in all nature. It was a princely specimen of this object and it was calculated to reduce every one of us to the state of mind of a tittering eight-year-old. You made us pass it round the table and it was in that state of mind, as we all handled it, that we went on to consider the coinage of the Seychelles. I think this episode tells me that you have brought to our Committee zest and humour as well as dignity and authority, and I would also say that I have enormously admired the way in which you have encouraged us to respond to imaginative ideas and to innovation, and especially technical innovation, while keeping at bay some of the forces of commercialism and sentimentality and other things that pervade our world today.

Sir, for many years we have sat round a table discussing banners and dragons and emblems of that kind and I suppose now feel a little like Sir Bedivere reminiscing by the lakeside. I have, alas, no Excalibur, but before your barge comes, Sir, I have this present to make to you, which has been confided to me by the Royal Mint. It is so jewel-like and sparkling that it almost looks as if it ought to have Excalibur embedded in it, but it is actually a sculpture by Mr Robert Evans. It has your portrait in the middle, Sir, and around this magic vortex are, as I believe, the elements of modern coinage, its raw materials, floating as it were in the waves of thought. Round about the edge are the finest productions of the Royal Mint during your time. May it please Your Royal Highness to accept it as a mark of the gratitude and the respect, and may I say, the affection, in which you have been held by the members and the officers, past and present, of the Royal Mint Advisory Committee.

OBITUARIES

RICHARD DUNCAN BERESFORD-JONES (1903–2000)

RICHARD Duncan Beresford-Jones died on 25 August 2000 at the age of ninety seven. Born in Wolverhampton, he went to Harrow and Oxford before joining the family steel business in the 1930s. An accountant by profession, he latterly lived at Castle Hedingham in Essex. He had a long interest in a variety of antiquarian studies including oriental antiquities, especially Japanese metal-work, and, of course, numismatics. Although he sold most of his coin collections in the 1980s and early 1990s, he retained an interest in numismatics and continued to be a member of our Society. In his later years he developed interests in water-colour painting and in the study and writing of poetry, even to the extent of learning Russian so as to be able to read poetry in that tongue.

Beresford-Jones is one of a select band who have made substantial and lasting contributions to the study of both British and French numismatics. He was elected to membership of the British Numismatic Society in 1953 and served as a member of Council from 1955 to 1959. His particular interests extended from the later middle ages to the seventeenth century and, in particular, he was attracted to the beautiful and well-executed gold coins of those periods. He formed a splendid collection of choice specimens of these, the English part of which was sold by public auction by Spink and Son Ltd in 1983, and the Scottish by the same firm in 1995. He was also interested in the productions of the Oxford mint under Charles I during the Civil War and, as well as forming a collection of the gold struck there, he assembled an important group of the silver half-crowns of that mint, also sold by Spink in 1995. The French, or more strictly the Anglo-Gallic, part was sold by private treaty to the late Herbert Schneider in the late 1980s.

It is Duncan Beresford-Jones's published works, however, which form an enduring record of his perceptive and sound numismatic judgement. The first of these was his study of the huge three pound pieces struck in Oxford by Charles I during the Civil War entitled 'The Oxford Mint and the Triple Unites of Charles I' published in the *British Numismatic Journal*, vol. 27 (1954). This was followed by a study of the smaller gold denominations, 'The Oxford Mint, 1642–6: Unites and Half-unites', also published in the *Journal*, vol. 28 (1957). These works are still the standard references for the series that they cover and are constantly referred to by all who work on them.

He also studied the gold Anglo-Gallic coinage, that is to say the coins struck in the name of English princes in France during the time when they were lords, dukes or princes of Aquitaine and during the period following the battle of Agincourt (1415) when they became, first heirs, then, for over thirty years, *de facto*, kings of, at least, part of France. The fruit of these studies was a book, *A Manual of Anglo-Gallic Gold Coins*, published by Spink in 1964, followed by an article in the *British Numismatic Journal* entitled 'The Salutes of Henry VI' in vol. 43 (1973) and a further note in the same journal in 1978 entitled 'Additions to the Anglo-Gallic Gold Series'. Once again his work was sound and lasting and is still referred to even though it has been to some extent succeeded by Elias's great work in the same field that also covered the silver and billon coinages.

We can remember Duncan Beresford-Jones as a member of our Society who in a long and productive life made lasting contributions to the study of British Numismatics.

PETER WOODHEAD

MRS GLADYS MARGARET DELMÉ-RADCLIFFE (1913–2000)

With the death of Peggy Delmé-Radcliffe (as she was universally known) in May 2000 at the age of eighty seven, the Society has lost one of the few serious lady collectors amongst its membership. From 1970, when she was first elected, she took an active interest in the affairs of the Society for more than fifteen years. During this time she served on Council and, for five years from 1974, as one of the *Journal's* editorial team. She was responsible for the practical side of producing the volumes, a task that she carried out with her customary efficiency and good nature.

Gladys Margaret Nugent was the daughter of a colonial civil servant, based in the West Indies. Peggy spent much of her early and middle life abroad. Her husband Peter, a member of the Delmé-Radcliffe family that had lived at Hitchin Priory in Hertfordshire for many generations, was a tin miner. He worked extensively in Africa and Asia and during many years spent in Malaysia became the senior figure there in this field. As well as learning to speak fluent Malay, Peggy at various stages in her life took up all kinds of activity with typical enthusiasm – from golf and gliding to painting and playing the accordion. In later years after they had returned to England, she practised healing with her hands, and her reputation was such that sufferers with back pain would come from all over the country for her help that was, in both senses, freely given.

The Delmé-Radcliffes settled in the village of Aldbourne, near Marlborough, in Wiltshire. At the local newsagent she would examine the change in the till for rare dates, and mentioning this to Christopher Blunt, who lived only a few miles away at Ramsbury, she was encouraged by him to take an interest in English medieval coins. Under his guidance she began to collect silver coins of the fourteenth and fifteenth centuries, specializing in the reign of Edward IV, on which Blunt had himself been co-author of the standard monograph. The sale catalogue of her collection, which was dispersed by Glendining's on 17 April 1985, was expertly prepared by Mr Peter Mitchell of Baldwin's, and is a basic work of reference. Its usefulness is enhanced by the set of study photographs made of her coins of Edward IV, which at 470 numbered more than those of this reign in the Lockett collection. Many were collected in the first few years from 1969 to 1975. They included extensive runs of the commoner coins as well as many of the important rarities, and were gathered from many sources, small dealers and coin fairs as well as auction sales and the leading London dealers. Although she published little – on the scallop mark on York pence of Richard II in the *British Numismatic Journal*, vol. 48 (1978), the English groats from the Innerwick Hoard, vol. 52 (1982) and some unpublished varieties of Edward IV, vol. 41 (1972) – Peggy had a very good knowledge of the coins of her chosen period which was reflected in the thoroughness of her collection and her careful description of individual items in it.

After English coins, she turned her attention to Kushan and Gupta gold, and these were also sold in the eighties (Glendining's, 2 February 1983 and 5 September 1984). But in later years she was less seen in numismatic circles: with the infirmities of age she resorted to a motor wheelchair, which she used to call her chariot. Peggy Delmé-Radcliffe was a delightful and indomitable lady of the old school, outgoing but modest, and warmly regarded by all who knew her.

STEWARTBY

PATRICK FINN (1942–2000)

Patrick Finn collapsed on Easter Sunday, 23 April 2000, having just supervised the London view of his sale of Irish coins to be held in Dublin the following Saturday, 29 April. He was diagnosed with a deep brain tumour and died six months later on Friday, 21 October, having, but for a day or two, never left hospital.

Our relationship could be said to have begun before we ever met. After the sudden death of Albert Baldwin in November 1967, in early 1968 I attended a meeting of the committee negotiating with the government over the 1966 gold coin legislation. We met in Spink's boardroom on the top floor: present were representatives of the three leading dealers and three leading auctioneers, with Patrick Neill, QC, in the chair. After the meeting Douglas Liddell invited me to stay behind for a chat, the forceful introductory remark being 'We stick together'. Who was I to argue? From the beginning Douglas, a contemporary of my late cousin Albert, was very kind to me.

Patrick had joined Spink from the British Museum in 1965, but I have no recollection of when we first met. Douglas Liddell was often abroad and handled the gold coins, so I don't doubt we were soon in contact and fast became friends. He came to my 40th birthday party in October 1973, and I once went to his home in Boxgrove, Guildford, and met Frank Brady, a brother of the owner of the sale of Irish coins in Dublin.

We soon liaised over all manner of things – bad debts, slow payers, light-fingered gentlemen and other mutual problems. We quickly built up trust in each other that, over the years, became

virtually total. It was sometimes commercially and politically advantageous to know each other's secrets, to know what was going on in the market place, if only to keep London in the forefront of numismatic business. It was all right for me, for I was answerable to no one, but Patrick had superiors and it could have been embarrassing for him had they learned of what I knew of their activities.

At one time we had regular suppers together. He, very conveniently, was then living by Parsons Green station, twenty minutes away on a District Line train, a shower and change, a drink, Linda perhaps joining us, and off to a restaurant nearby, of which there were many. Doubtless over one such supper we agreed a takeover of Glendining's as both companies had a large investment in the firm, and no successor to Mr French had been groomed. Lunch was arranged with Douglas Liddell, later with DGL and Mr. French, the next to be with Christopher Weston of Phillips, owners of Glendining's. In the event it was not to be, for the ship owners Andrew Weir bought Spink, and Spink started their own auctions.

We did much business together but I cannot remember a major disagreement, nor can I ever remember writing to him or even putting anything down on paper. So much so that we each encouraged our staff to deal through ourselves, certainly initially. Rather as one used to do with Mr French, following in the steps of Albert Baldwin, we would ring each other early in the day, soon after 8 o'clock, and in a few seconds sort out any problems that might occur. I well remember one early-morning call from Patrick. It would have been 23 June 1976, the morning after a Society meeting, at which Elmore Jones on my behalf had exhibited a coin I had bought earlier that month at a Spink/Glendining's sale, a Confessor late transitional type (*BMC XIV*, North 835), catalogued as Worcester, but actually Droitwich. He complained bitterly that I should have put him right and saved him the embarrassment of a ticking-off from Douglas Liddell, but I explained that I had given him the answer in my catalogue of the Elmore Jones collection (lot 900), and if he could not be bothered to read it, not to blame me. Anyhow, the moneyer Godric was not given in North for Worcester. Q.E.D.

It was a disappointment, but in no way surprising, that Patrick resigned from Spink on Christie's takeover in 1993. He was still quite active in London, and for a short time was a director of Baldwin's Auctions Ltd, but I was able to see him in Cumbria as we had a holiday cottage in Loweswater. The last time he and Linda came to supper turned out to be a very jolly occasion. Unbeknown to Patrick, Sandy Campbell (elected 1966) and his wife Helen were staying with us and, as it happened, Surrey neighbours, *en route* from Edinburgh to Preston, dropped in, stayed to supper (Armenian lamb) and so had to stay the night. A good time was had by all eight of us.

I saw Patrick in Preston hospital ten days after his collapse, awaiting the result of his biopsy. On subsequent trips to Cumbria Linda assured me Patrick would find any visit too upsetting, and I only saw him again in late September. I came away very depressed, certain that I would not see him again.

On 3 October a requiem mass (in Latin) was held at the London Oratory, attended by many, but many others, such as Douglas Liddell, were unable to make the journey and pay their last respects.

He will be greatly missed.

PETER MITCHELL

PROFESSOR JEFFREY MASS (29.6.1940–30.3.2001)

Jeffrey Mass was Ichihashi Professor of Japanese History and Civilisation at Stanford University and first came to England in the summer of 1984 to teach for the term at St Antony's College, Oxford. He acquired some inexpensive late Anglo-Saxon coins but tired of them and wanted to move on. I thought I should get to know him better and find out what his thoughts were, so I invited him to lunch. This was to be the first of many and the beginning of what was to be a close friendship which spanned the Atlantic Ocean and nearly a third of our lives. He decided to collect coins of the Short Cross series. I asked him why and he replied that they were contemporary to the period of Japanese history he studied and taught, which I thought made sense. Thus began the Mass incursion into the series, which was to prove highly significant: he was a very determined

collector. He was elected a member of the Society in October 1984 and in 1993 read a paper on the early issues, of which he had made an extensive study. This was delivered with all the skills of a practiced lecturer. The paper was published in the Society's *Journal* for that year and remains a standard work. Soon after its publication I found two coins he had not recorded. It was a source of banter and amusement between us but, of course, I would not have known them new without his paper.

By this time Jeffrey had moved from St Antony's to Hertford College and had bought a house in Islip, Oxford, with the collection at the Ashmolean Museum and the scholarship of Michael Metcalf and Nicholas Mayhew, was well established on the numismatic map but Jeffrey was perhaps to make it the more so. He persuaded Hertford College to host several congresses of the British Association of Numismatic Societies which were well attended and much enjoyed. Jeffrey's room in the garret, as I referred to it, overlooked the dreaming spires and the college was conveniently close to the finest and probably oldest hostelry in the City. Many an extra-curricular debate would take place there. Jeffrey made many friends in the numismatic world here in England and also found friendship with Doctor William 'Bill' Conte who was a near neighbour. It amused the three of us that it was I who put them in touch from my desk in London.

Jeffrey's numismatic studies and collection continued to progress and he amassed an in-depth representation which exceeded that of any previous numismatist. A considerable number of his acquisitions were of notable pedigree but the provenance he most cherished was that of an important Ia of Northampton (F.E.J. 1479) which was a birthday gift from his daughter, Tara. His collection will shortly be published as a *sylloge* volume, a rare achievement by a private collector and independent scholar. It is sad that he did not live to see a copy of it but he had the satisfaction of knowing that his work was complete. A monumental publication in both senses of the word, it will be a necessary handbook for all interested in Short Cross.

Jeffrey collected until the very last and died on 30th March following a short illness which he bore with great fortitude. Shortly before his death he was elected an Honorary Fellow of Hertford College, a particular honour for a visiting foreign professor. Jeffrey wrote more books on Japanese mediaeval history than any other westerner but it is as an authority on Short Cross that he will be remembered in numismatic circles.

MICHAEL SHARP

NOËL WOOLF (24.12.1911–28.5.2001)

Noël Woolf will long be remembered for his substantial contributions to Jacobite numismatics, an area of study largely neglected since the death of Helen Farquhar. His authoritative work 'The Sovereign Remedy: Touch-pieces and the King's Evil' was published in the *Journal* in two parts (Vol. 49, pp. 99–121, Pls XIX–XXII and Vol. 50, pp. 91–16, Pls II–IV), followed by a supplement (Vol. 55, p. 195) and later as a B.A.N.S. publication (Doris Stockwell Memorial Papers No. 4, 1990). In 1981 he read a paper entitled 'The Medals of the Children of George II and James III', the contents of which were incorporated in his other major work 'The Record of the Jacobite Movement' (Spink and Son Ltd, 1988).

I knew Noël well and found him quiet, modest and very friendly. With his wife, Freya, he attended several B.A.N.S. congresses where they made many friends. Noel was a Fellow of the Society of Antiquaries of Scotland and member of The Royal Stuart Society, The 1745 Association and the Worthing Numismatic Society, being a former Chairman of the last. He will be much missed in many circles.

MICHAEL SHARP

PRESIDENTIAL ADDRESS 2000

D.W. DYKES

TONIGHT we mark the ninety-seventh anniversary of the foundation of our Society and in accordance with what has long been established practice, I will divide my second address as your President into two parts, firstly reviewing the Society's current state and then, continuing my theme of last year, offering some further observations on eighteenth-century token manufacture.

The past year has once more, I think, been a successful one and, encouragingly, our numbers have continued to increase. I must confess, though, to one small disappointment. Until a week or two ago I had hoped to have been able to announce tonight that we would be celebrating entry into the new millennium by having achieved a grand total of six hundred members. This has proved a vain ambition. For although twenty-seven new members have been elected over the session now ending, our losses, through death, resignation or amoval, leave our membership at only 588 – seven honorary members, 473 ordinary members, one junior and 107 institutional.¹ Perhaps next year the elusive target will be attained.

Bare numbers, in themselves, are, of course, not everything. What is important is the steady increase that has been maintained over the years. This is a much more faithful gauge of the vigour of a society as indeed is the remarkable – and vital – continuity in membership that the Society has always enjoyed. Looking back over the past three decades, for example, something like a quarter of those personal members listed in 1970 remain members today. This speaks volumes for the engagement of members and for the capacity of the Society to cater for their disparate interests. But there is never room for complacency and on one point at least I feel I must share my concern with you. It is something I have touched on before, as have my predecessors, but this year it is brought into stark reality. In 1970 we could boast 17 junior members of whom at least six are still members and active numismatists. Four of our six current Vice-Presidents were originally junior members. For some time, however, junior membership has hovered at no more than the three or four mark and today we can claim only one junior member. This is not good for our long-term development; it is crucial that young blood is continually injected into an organization such as ours and I would ask everyone to try to encourage suitable youngsters to apply for membership.

Our Treasurer has just reported on the continuing soundness of the Society's finances. We have once more ended the year with a reasonable operational surplus and, in the light of this and the Treasurer's future projections, your Council felt it again possible to recommend that the annual subscription should be kept at the level it has maintained for the past nine years. Most of our recurrent financial resources go into the *Journal* and recent escalations in its costs did give us pause for thought because for a society such as ours it is vital that the *Journal's* style, range of contents and academic integrity are preserved. In the event we decided to change our publishers and printers with what I hope will prove to be a considerable reduction in our production costs yet without any diminution in the standard of the *Journal*; indeed the volume which you should all receive before the end of the year will be a bumper one. My thanks are due to our Editors, to Douglas Saville and to Tim Webb Ware for making all this possible. Tim Webb Ware has, incidentally, been the Society's longest-serving Treasurer, having completed well over fifteen years in this office, and I am sure that you will all join with me in thanking him warmly for the care with which he has handled our finances throughout this period.

Every year the President's review is overshadowed by the list of the deaths he has to report and on this occasion my duty is a particularly sad one since a number of esteemed friends have been

¹ Subsequent to the meeting three members who had been included in the list of amovals renewed their subscriptions; as at 31 December 2000 the membership of the Society thus stood at 591: seven honorary members, 476 ordinary members, one junior and 107 institutional.

taken from us. In February David Dewar Mitchell – always known as ‘Douglas’ – died at the age of ninety three. He was the sole surviving grandson of A.H. Baldwin, founder of the family firm of numismatists for which he worked for sixty three years. He had joined the Society as long ago as 1932 and at the time of his death was the doyen of our membership having just exceeded the span of the late Horace King by a few months. ‘Douglas’ Mitchell’s knowledge of collectors and collections was encyclopaedic and his eye for a coin remarkably penetrating especially bearing in mind his long-standing sight disability. He was certain to be the first to make one welcome at the Adelphi and when opportunity could be found – and, more often than not, it was – he was always ready to share with one his seemingly limitless enthusiasm for plants and gardens. It is good to know that his family has made arrangements for him to be commemorated at his beloved Kew.

Mrs. Margaret Delmé-Radcliffe died in May at the age of eighty seven. Elected to membership in 1970 she had served as a member of Council and was, between 1974 and 1979, an Editor of the *Journal*, concerned primarily with the technical side of its production. Although her own collections were wide-ranging, Peggy’s special area of interest for us lay in the English silver coinage of the fourteenth and fifteenth centuries of which, as Lord Stewartby stresses in Volume 70 of the *Journal*, she had close knowledge, and on which she lectured to the Society and contributed a number of notes to the *Journal*.

In August we also lost Richard Duncan Beresford-Jones at the age of ninety seven. Connoisseur, water-colourist, poet and man-of-letters, Duncan Beresford-Jones was elected to the Society in 1953 and had also served as a member of Council. As befitted someone of his artistic sensibility he was attracted particularly to the later hammered English and the Anglo-Gallic gold coinages. He formed prime collections of both series but his lasting numismatic memorial will be his seminal papers on the Civil War Oxford gold coinages in the *Journal* and his *Manual of Anglo-Gallic Gold Coins* (1964), still a work to be consulted. Our Vice-President Peter Woodhead, who provided Beresford-Jones’s nephew with a brief account of his uncle’s numismatic interests and achievements for inclusion in his address at the latter’s memorial service, contributes a fitting obituary to Volume 70 of the *Journal*.

All three members I have referred to were well advanced in years but there are two others who have died in their prime and their loss is therefore all the more poignant. Roger Shuttlewood had been a member for over thirty years when we also learnt of his death in August at the age of fifty nine. A stockbroker by profession, over time Roger Shuttlewood built up an extensive collection composed largely of the smaller denominations of the Tudor period. It was a true student’s cabinet and his knowledge of the series was substantial. Unhappily, although he was most generous in sharing his expertise with others – to take but one example, his important contributions to the last edition of the *English Silver Coinage* (1992) – he had little opportunity to publish himself and with his tragically sudden death much of his accumulated wisdom has perished too.

The death of Patrick Finn last month at the age of fifty eight is a grievous loss to the world of professional numismatics. He had been a member of the Society since 1966, a year after he had joined Spink and Son Ltd, but I knew him even before that when he was an assistant in the Coin Room of the British Museum. His initial years with Spink, under Douglas Liddell, were to be his really formative ones numismatically and his early production with Anthony Dowle of *The Guide Book to the Coinage of Ireland* in 1969 was a model of what such a book should be. By 1993 Patrick had become a director of the company but, following its take-over by Christie’s, he decided to strike out on his own, and, returning to his native Cumbria, he launched his own ‘mail order’ business from Kendal, producing informative pocket-book lists that were always a joy to receive. Patrick possessed a discerning and intuitive eye, a meticulous attention to detail, and, above all, absolute integrity. His rapport with both collector and scholar reflected his thorough professionalism and knowledge of his field: the many who attended Patrick’s Requiem Mass at the London Oratory bore witness to the affection and respect in which he was held; he will be sorely missed. Peter Mitchell, who of all of us, probably knew Patrick Finn the best, writes about him more personally in Volume 70 of the *Journal*.

A few days after the death of Patrick Finn came news that John Kent had also died at the age of 72. Although he had resigned from the Society on his retirement from the British Museum in 1990 his membership extended back to 1954 and spanned virtually his whole career at the Museum

where for his last seven years he was Keeper of Coins and Medals. John Kent served as a member of our Council from 1955 to 1965 and for six years during that time was our Librarian. His distinction as a numismatist was recognized by his election to the British Academy in 1986, his presidency of our sister society between 1984 and 1989, and the award to him of the Academy's Derek Allen Prize and the Medals of both the Royal and the American Numismatic Societies. He will be remembered chiefly as a Romanist and his enduring monument will, of course, be his fundamental work on the coinages of the later Roman Empire. But he was a man of many parts and he devoted significant attention to numismatic subjects far removed from his chosen specialism, from Iron Age Britain, for instance, through the Anglo-Saxons, the Tudor and Stuart periods to Georgian England, to all of which he made notably percipient contributions. Generous in sharing his expertise, John Kent was an accomplished speaker lecturing frequently to this Society, to BANS (of which he was President from 1974 to 1978), and to many other society and university audiences.

Finally, I must mention another Fellow of the British Academy who also died last month. Professor Henry Loyn, although never a member of our Society, was a great friend and a warm advocate of the importance of numismatics to Anglo-Saxon and Norman historical scholarship. In this he was inspired by his mentors, Sir Frank Stenton and Professor Dorothy Whitelock, and was their obvious successor as Chairman of the Committee of the *Sylloge of Coins of the British Isles* between 1979 and 1993. He was one of our most distinguished medieval historians and possessed an almost inherent appreciation of the significance of non-written evidence to one's understanding of the period. Every time one met Henry Loyn – and I knew him over many years – one could not fail to be freshly inspired by both the depth and the breadth of the scholarship of this retiring and gentle man. Very much, I am sure, the reaction of those of you who heard his memorable and eloquent Linecar Lecture in 1990.

Turning to happier matters it was a particular pleasure for me to be able to present our premier award, the John Sanford Saltus Gold Medal, to Robert Thompson in May. Robert, a dedicated member of the Society for well over three decades, has put us so much in his debt through his authoritative enlargement of our understanding of seventeenth-century trade tokens. The text of my citation on that occasion and of Robert's felicitous reply is published in Volume 70 of the *Journal*.

In repeating now my warm personal congratulations to Robert, I must also extend them, too, to Richard Doty who was awarded the Royal Numismatic Society's Medal this year. And I must not omit either the names of Nicholas Mayhew and Nicholas Holmes who shared the Royal's Lhotka Prize for 1999.

Nor must we pass by the achievements of Martin Allen, Kevin Clancy and Gareth Williams who have each been awarded a doctorate in their particular fields. As it so happens all three addressed us during the year: Martin Allen giving us a foretaste of some aspects of his forthcoming special publication on the *Durham Mint*, Gareth Williams sharing with us his preliminary assessment of the 1997 Appledore hoard of Confessor pennies, and Kevin Clancy illuminating the Mint reforms of William Wellesley Pole, an annate of his study of the Regency restoration of the coinage.

This eclecticism of subject was demonstrated throughout the session with Philip de Jersey's critical examination of the silver coinage of Cunobelin – which I hope we will soon be able to read in the pages of *Britannia*,² Peter Woodhead's thoughts on early Stuart coinage arising from his *Sylloge* editorship of the second Schneider volume, and Harry Manville's fluent command of the intricacies of Bank of England countermarked silver, a talk marked by the presence of a number of welcome overseas guests. And, indeed, by our two visiting speakers, Lorna Goldsmith and Christine Wiskin who opened up new tangential dimensions for us; introducing us, respectively, to the eighteenth-century delights of Vauxhall and Ranelagh through the entry passes to these gardens and to the importance of the lady banker Charlotte Matthews for the financing and distribution of Boulton's 'cartwheel coinage' of 1797.

Our Director's skill in arranging such an enjoyable and varied programme was borne out not only by the high attendances at our meetings but also by the informed discussions that followed

² Volume 32 (2001), 1–44.

each lecture, themselves a reflection of the wide-ranging expertise and interest that characterize our Society. What is disappointing though, is that the custom of presenting exhibits at meetings seems to have fallen by the wayside. Time was when pretty well every meeting would be marked by exhibits, often germane to the subject of the lecture but not always so and sometimes provocative of spirited debate. This year there was only one and I hope that members will give some thought to a revival of this practice next session.

The theme of this year's 'out-of-town' meeting in Colchester was 'Eastern Counties Numismatics' and, as usual on these occasions, it encompassed, in a local context, a diversity of papers extending from the Iron Age to modern times, the high point being a stimulating revisit to the Colchester Hoard by Marion Archibald. Thanks are due to Philip Wise and the Colchester Museum Service for their hospitality and for their organization with our Director of a Saturday really well spent. Already Edward Besly's plans for next year's meeting in Birmingham under the broad topic of 'Colonial and Overseas Coinages' are well advanced and I do hope that as many members as possible will be able to take part in the exploration of a theme the Society has not reviewed in broad terms for a considerable time.

Our meetings are one of the three essential benefits of membership of what is justly considered to be a learned society. They bring members together in comparatively informal gatherings to hear and to discuss original contributions to numismatic research. Unfortunately, in a society that is national, indeed international in the scope of its membership, only a minority of our members can regularly attend our meetings and this is where the *Journal*, the second of our benefits, plays such a vital role since it is the one advantage of membership that everyone can enjoy. But it is much more than this because it sets the standard by which the society is judged in the academic community overall and we owe much to our successive Editors – now Nicholas Holmes and Gareth Williams – whose onerous task it has been – and is – to maintain the integrity of the *Journal*.

Of course the *Journal* is no longer our only publication. As you all know, thanks to the munificence of the late Roy Osborne we have been able to launch, successfully, the publication of a programme of extended monographs that it would not normally be possible to contain within the ambit of the *Journal* or might not be feasible commercial propositions. The third volume in this series will be Harry Manville's *Tokens of the Industrial Revolution: Foreign Silver Coins Countermarked for Use in Great Britain c.1787–1828*. The text has been approved and is about to go to the printers with a publication date set for the spring of next year. It will be *the* authoritative work on these complex issues and I am confident that it will do well.

The third benefit of membership is the library. The death of John Kent reminds me that it was due to his initiative that our library and that of the Royal Numismatic Society were consolidated as one joint resource. It is a resource that continues to grow under the able custodianship of our present Librarian, Tony Holmes, who has put so much effort over the past two years into its reordering in new accommodation in the Warburg Institute and so much thought into modernizing its cataloguing. We must all share his dismay, therefore at the discovery of what seem to be more depredations of the kind that I referred to last year. The clear abuse of a facility so central to the interests of our members has already resulted in the introduction of security measures that not long ago we would never have contemplated. Now a joint committee of the Councils of the Royal and this Society has been set up to consider the problem in even greater depth; it is a salutary thought that its deliberations may well lead to further limitations on the open access that members have enjoyed for so many years. But sadly we are living in a real world that, I fear, is also a very selfish one.

Since my last address the reality of the Society has reached out to another dimension; we have entered cyber-space and now we have our own web site on the Internet. It is all beyond me but I am told that by conjuring up www.britnumsoc.org on one's computer one will be 'online' with the Society. What we all hope, of course, is that this facility will not only provide an additional means of communication with members but will also increase international awareness of the Society and be a way of attracting a wider membership. It is all early days and the Secretary will welcome any improvements you may wish to suggest.

My own activities this year began the day after our last Anniversary Meeting when, as your President, I was privileged to attend a luncheon at St James's Palace to mark the retirement of

HRH the Duke of Edinburgh after forty-seven years as President of the Royal Mint Advisory Committee on the Design of Coins, Medals, Seals and Decorations. Among an impressive gathering of past and present members of the Committee, leading numismatic artists and a skein of seven former Chancellors of the Exchequer as Masters of the Mint, I am glad to say that I was far from being the only member of our Society present. Indeed, the health of Prince Philip was proposed by John Porteous, the longest-serving member of the Committee after the Duke, in what was a *tour de force* performance, the record of which appears in the *Journal* that carries this address. In April I was present, with other members of the Society, at a reception to celebrate the opening of Spink's new premises here in Bloomsbury. It was a very happy occasion although I have to say that I had personally viewed the move from St James's with some misgiving. The transition, however, has been a successful one, the new quarters are impressive and everyone in the firm I have spoken to seems to be more than content with the move. I had hoped to attend a preview of the new Queen Elizabeth II Great Court at the British Museum last week to which I had been invited as your President. This was not possible but I am glad to be able to say that, in my absence, our Vice-President Hugh Pagan was able to represent the Society and to cast his informed eye over this new monument to architectural ingenuity.

In case you should think that it has all been a life of junketing I have also delivered a number of lectures. I will mention two: one to the South Wales and Monmouthshire Numismatic Society in Newport in June and the other to the Token Congress at its annual meeting in Cardiff in September. I refer to these, in particular, because my hosts were Alan and Noel Cox, twin brothers who have done so much to encourage local coin studies and par anumismatics in particular. It has pleased me immensely that tonight you have seen fit to elect Alan Cox to membership of this Society.

It is customary for the President to conclude this part of his report by thanking the Officers, members of Council and indeed the membership of the Society as a whole for their support and encouragement over the year gone by. For me this is no empty formula and my appreciation of the sage advice and unfailing goodwill I have received is a heartfelt one. I thank you all but, in doing so, I would like to make special mention of Charles Farthing for his efficiency, enterprise and equanimity as our administrative anchor.

I hope that you will join me later in toasting the health of the Society, a gesture made possible this evening through the generosity of Peter Mitchell, Tim Webb Ware and another of our members. It will also be an opportunity to remember those who have passed away this year and in particular Patrick Finn. Before that, however, the second part of my address.

(The President then delivered a paper entitled 'The Tokens of Thomas Mynd', the text of which is published at pages 90–102, above).

PRESENTATION OF THE SANFORD SALTUS MEDAL TO MR ROBERT HUGH THOMPSON, 23 MAY 2000

In making the presentation, the President said:

It is my privilege this evening to present, on the Society's behalf, its highest award, the Sanford Saltus Medal, to Mr Robert Hugh Thompson. Since its foundation in 1910, the Medal has been the medium through which the Society's membership as a whole can recognize the numismatic distinction of a fellow member as expressed through his or her writings. Past recipients have included many who have made signal contributions to the development of British numismatics and tonight Robert Thompson's name is added to that select band of honorands.

Mr Thompson was elected to membership of our Society in March 1964. This was as a junior member but already, as a schoolboy four years earlier, he had entered the lists as a numismatic author. And since 1966 not a single year has passed without at least one numismatic paper flowing from his active and versatile pen. Primarily, but by no means exclusively, these have been in the field of British trade tokens, or, as befits a scholar who is by profession a librarian, as meticulous bibliographic studies. In our own *Journal*, which, under the terms of the Sanford Saltus Medal Fund, is a main focus for the award, have appeared a number of pivotal articles that have made manifest not only Robert Thompson's exacting attention to numismatic detail but also his intellectual acumen and his sensitivity to historical nuance.

Much of his work has related to the seventeenth century and – although one must pay particular tribute to his fundamental survey of the dies of Thomas Spence – I imagine that it is in this century and with its trade tokens that his numismatic heart really lies. It is peculiarly apposite that among a number of biographies that Mr Thompson has been invited to undertake for the *New Dictionary of National Biography* is one of Thomas Snelling, who first began the scholarly study and documentation of seventeenth-century tokens. For, in this respect, Robert Thompson is the Snelling of our own age. And our *Journal* bears witness to this not least with his notable resolution of the vexed question of central or local token production and his critique of the town pieces of Gloucester.

Of course, in considering the award members may now take into account work outside the Society's own publications. In 1975 Mr Thompson's increasingly encyclopaedic knowledge of seventeenth-century tokens led to an invitation to him to publish the remarkable Norweb collection of this series in the *Sylloge of Coins of the British Isles*. This monumental task, shared since 1988 with Mr Michael Dickinson, is now, after the labours of a quarter of a century, nearing its close and this month sees the publication of the sixth in its sequence of fascicules. They comprise an *oeuvre de première qualité* that must be mentioned tonight because it is a *catalogue raisonné* of exceptional value to both the seventeenth-century numismatist and historian and an enduring testimony to Robert Thompson's analytical skills and scrupulous scholarship. Underlying all I have said must be the consideration that Robert Thompson's impressive contribution to numismatic science has been made as an adjunct to a busy professional career, and I am delighted now to be able, on behalf of the Society, to present to him the Sanford Saltus Gold Medal for 1999.

In reply, Mr. Thompson said:

Mr President, I am very grateful to members for the award of this medal. I particularly appreciate a gold medal in the light of the comment on one of the programmes I arranged as Director, that it had been full of copper, brass, and lead!

I see from the list of previous recipients that I am the first to have published primarily on tokens. Your vote therefore leaves no doubt that such non-regal and post-medieval artefacts are worthy of serious study; but of course that was established long since by J.G. Milne and by George Boon.

As a native of Cardiff I remember George Boon arriving at the National Museum of Wales. This must have been a great relief to the Keeper of Archaeology, for Dr Savory was little interested in coins, and did not relish being badgered on the subject by schoolboys such as myself. Boon,

however, soon set up the South Wales & Monmouthshire Numismatic Society. Another founder member and a member of this Society, John Roberts-Lewis, was generous to me with his duplicates.

After moving to London in 1962 I joined the Hayes Coin Club, where a visit by our late Secretary, Wilfrid Slayter, brought me into this Society; but it was a talk at Hayes by George Berry, in (I think) June 1966, that made me see seventeenth-century tokens as the series on which I wished to concentrate. Their attraction has been the opportunity to combine documentary research into issuers with technical study of dies etc.

An adverse consequence of their unofficial character is that they lack a central archival source, at least since the 1851 nationalization of the Corporation of Moneyers. I am glad, though, to have persuaded people that the tokens were made by the moneyers, thus overthrowing a myth which had lasted more than two centuries.

From my papers drawn to members' attention for the ballot, I conclude that if one is careful to give one's reasons for a statement, one may be permitted to revise one's conclusions. In 1975 I understood the '300 pounds' received in Bristol farthings as £300-worth; in 1988, thanks to the advice of John Brand, I changed this to 300-lb weight in each of two barrels; and in 1994 I amended this to three barrels of 300-lbs each.

A number of my shorter notes have been connected with publication of the Norweb collection, for which I now have Michael Dickinson as a willing and able coadjutor. Part VI has been published this month, and intentionally it is numbered 49 in the *Sylloge* series, though always due after Volume 50.

For such a work one has a duty to attempt an explanation of what one publishes, even when the evidence is incomplete. I have in mind not so much my suggestion that a poulterer's token from INFEILD and St Ives refers firstly to Enfield in Middlesex, which in my view is a reasonable, indeed it remains the only attribution. I think rather of some armorial tokens attributed to the island of Sark, which has followed a logical argument to a somewhat extreme conclusion. I shall continue to worry about this until proof is forthcoming.

The Norwebs have kindly dedicated this latest volume to the memory of my mother, who cut out and mounted photographs while caring for my father when housebound. He died in January, and I will finish with a thought from his fellow-townsmen, Thomas Hobbes of Malmesbury. Though not about tokens, it might be so construed. 'Words', Hobbes wrote, 'are wise men's counters, they do but reckon by them: but they are the money of fools ...'. Thank you.

PROCEEDINGS OF THE BRITISH NUMISMATIC SOCIETY, 2000

PRESIDENTS OF THE SOCIETY

1903–08	P.W.P. Carlyon-Britton, DL, FSA
1909	W.J. Andrew, FSA
1910–14	P.W.P. Carlyon-Britton, DL, FSA
1915–19	Lt Col H.W. Morrieson, RA, FSA
1920–21	F.A. Walters, FSA
1922 (until 22 June)	J. Sanford Saltus
1922 (from 28 June)	G.R. Francis
1923–25	G.R. Francis, FSA
1926–27	Major W.J. Freer, VD, DL, FSA
1928 (until 20 February)	Major P.W.P. Carlyon-Britton, DL, FSA
1928 (from 22 February)	Lt Col H.W. Morrieson, RA, FSA
1929–32	Lt Col H.W. Morrieson, RA, FSA
1933–37	V.B. Crowther-Beynon, MBE, MA, FSA
1938–45	H.W. Taffs, MBE
1946–50	C.E. Blunt, OBE, FSA
1951–54	E.J. Winstanley, LDS
1955–58	H.H. King, MA
1959–63	D.F. Allen, BA, FBA, FSA
1964–65	C.W. Peck, FPS, FSA
1966–70	C.S.S. Lyon, MA, FIA
1971–75	S.E. Rigold, MA, FSA
1976–80	P. Woodhead, FSA
1981–83	J.D. Brand, MA, FCA
1984–88	H.E. Pagan, MA, FSA
1989–93	C.E. Challis, BA, PhD, FSA, FRHistS
1994–98	G.P. Dyer, BSc(Econ), DGA
1999–	D.W. Dykes, MA, PhD, FSA, FRHistS

JOHN SANFORD SALTUS MEDAL

This medal is awarded triennially 'to the member of the Society whose paper or papers appearing in the Society's publications shall receive the highest number of votes as being in their opinion the best in the interests of numismatic science', by ballot of all the members.

The medal was founded by the late John Sanford Saltus, Officer de la Légion d'Honneur, a President of the Society, by gift of £200.00 in the year 1910.

Medallists

1910	P.W.P. Carlyon-Britton
1911	Helen Farquhar
1914	W.J. Andrew
1917	L.A. Lawrence
1920	Lt Col H.W. Morrieson
1923	H.A. Parsons
1926	G.R. Francis
1929	J.S. Shirley-Fox
1932	C. Winter
1935	R. Carlyon-Britton
1938	W.C. Wells

1941	C.A. Whitton
1944	(not used)
1947	R.C. Lockett
1950	C.E. Blunt
1953	D.F. Allen
1956	F. Elmore Jones
1959	R.H.M. Dolley
1962	H.H. King
1965	H. Schneider
1968	E.J. Winstanley
1968	C.W. Peck (posthumous award)
1971	B.H.I.H. Stewart (later Lord Stewartby)
1974	C.S.S. Lyon
1978	S.E. Rigold
1981	Marion M. Archibald
1984	D.M. Metcalf
1987	Joan E.L. Murray
1990	H.E. Pagan
1993	C.E. Challis
1996	J.J. North
1997	P. Grierson (special award)
2000	R.H. Thompson

COUNCIL PRIZE

This prize was instituted in 1986 and takes the form of a triennial cash award to an individual, whether a member of the Society or not, who has made a recent significant contribution to the study of numismatics which falls within the Society's remit. Its purpose is principally to encourage younger scholars, and therefore preference is given to suitable candidates under 35 years of age.

Recipients

1987	M.A.S. Blackburn
1990	E.M. Besly
1993	B.J. Cook
1996	M.R. Allen
1999	P. de Jersey

All meetings during the year were held at the Warburg Institute and the President, Dr. D.W. Dykes, was in the chair throughout.

(For Officers and Council for 2000 see volume 69)

25 JANUARY 2000. Dr Philip de Jersey read a paper entitled *The silver coinage of Cunobelin*.

22 FEBRUARY 2000. The President announced the death of Mr David Dewar Mitchell, the Society's longest-ever serving member and sole surviving grandson of the founder of A.H. Baldwin & Son. Mr Ivan Parker was elected to Ordinary Membership. Mr Peter Woodhead then read a paper entitled: *Early Stuart Topics*.

28 MARCH 2000. Dr Philip de Jersey and Messrs. Richard Colliass, James Anthony Hall, Duncan Charles Pennock, Paul Rabin, John A. Talbot and Timothy Wilkes were elected to Ordinary Membership. Miss Lorna Goldsmith then read a paper entitled *Tickets and Passes to 'scenes of gay delight': The 18th century London Pleasure Gardens*.

25 APRIL 2000. Dr Gordon Andreas Singer and Messrs. Ronald Kirton, Henry Steuart-Fotheringham, OBE and William Myers were elected to Ordinary Membership. Mr Harrington Manville then read a paper entitled *The Bank of England countermarks, 1797-1804*.

23 MAY 2000. The President announced the death of Mrs Margaret Delmé-Radcliffe, a former member of Council and editor of the journal. Dr David Anthony Wood and Messrs. Edward Peter Archer, Eric Craig Hodge and John Jewell were elected to Ordinary Membership. The President presented the Sanford Saltus gold medal to Mr R.H. Thompson. Dr Martin Allen then read a paper entitled: *Ecclesiastical Mints in late medieval England*.

27 JUNE 2000. Dr Edward Laurence Levine and Messrs. Kenneth V. Eckardt, Paul Michael Hill and John Neil McCormick were elected to Ordinary Membership. Miss Christine Wiskin then read a paper entitled *Charlotte and the Cartwheel: The financing and distribution of the 1779 regal copper coinage*.

26 SEPTEMBER 2000. The President. announced the

deaths of Mr Richard Duncan Beresford-Jones, a former member of Council, and Mr Roger Alan Shuttlewood. Mr Alan Cohen was elected to Ordinary Membership and Mr David Hugh Morgan to Junior Membership. Dr Kevin Clancy then read a paper entitled *William Wellesley Pole*.

24 OCTOBER 2000. The President announced the deaths of Mr Patrick Finn, Dr John Philip Cozens Kent (a former member) and Professor Henry Loyn (1990 Linecar Lecturer and Chairman of the Committee of the Sylloge of Coins of the British Isles). Dr Paul Richard Sealey and Messrs. George William Cates and Harold Michael Mernick were elected to Ordinary Membership. Mr Paul Michael Hill was then formally admitted to Ordinary Membership. There followed a paper by Dr Gareth Williams entitled *The Appledore hoard of Edward the Confessor: Preliminary findings*.

28 NOVEMBER 2000. Messrs Alan Glyndwr Cox and Stephen Ford were elected to Ordinary Membership, and Harold Michael Mernick and Timothy Wilkes were formally admitted to Ordinary Membership. The following Officers and Council were elected for 2001:

<i>President:</i>	D.W. Dykes
<i>Vice-Presidents:</i>	C.E. Challis, C.S.S. Lyon, P.D. Mitchell, H.E. Pagan. Lord Stewartby and P. Woodhead.
<i>Director:</i>	E.M. Besly
<i>Treasurer:</i>	T.G. Webb Ware
<i>Librarian:</i>	A.J. Holmes
<i>Secretary:</i>	C.R.S. Farthing
<i>Council:</i>	M.R. Allen, M.M. Archibald, N.L. Biggs, J. Bispham, K. Bornholdt, K. Clancy, P. de Jersey, R.J. Eaglen, C. Eimer, N.M.McQ Holmes, S.C. Minnitt, D.H. Saville, R.H. Thompson and G. Williams.

Council's proposal that the subscription for 2001 should remain unchanged at £24 for Ordinary Members and £10 for Junior Members was approved. The President, Dr D.W. Dykes, then delivered his Presidential Address and was thanked, on behalf of the Society, by Mr P. Woodhead.

EXHIBITION

October

By Mr. P.D. Mitchell:

Edward the Confessor, trefoil quadrilateral penny by AELFERE ON YORK altered to read TAFERE ON ROCCE.

A similar piece exists in Berlin (SCBI 849), and the unaltered date has not so far been traced. A similar coin from different dies is in Glasgow (SCBI 1014), altered to read DOFR (Dover). The exhibit appears cast with filed edge (16.2 grams), and has raised rims similar to the Berlin illustration.

THE BRITISH NUMISMATIC SOCIETY REPORT OF THE TRUSTEES FOR THE YEAR ENDED 31 OCTOBER 1999

The British Numismatic Society was founded in 1903, and is a registered charity (No. 275906). The Society is established for the encouragement and promotion of numismatic science, particularly through the study of the coins, medals and tokens of the peoples of the British Isles and Commonwealth and the United States of America, and of such territories as may at any time be or have been subject to their jurisdiction.

The trustees of the Society for the year ended 31st October 1999 were the officers and members of Council:

D.W. Dykes (President); C.E. Challis, C.S.S. Lyon, P.D. Mitchell, H.E. Pagan, Lord Stewartby, P. Woodhead (Vice-Presidents); E.M. Besly (Director); T.G. Webb Ware (Treasurer); A.J. Holmes (Librarian); C.R.S. Farthing (Secretary); N.M.McQ. Holmes (Editor); M.J. Anderson, M.M. Archibald, M.A.S. Blackburn, J. Bispham, K. Clancy, J.A. Davies, R.J. Eaglen, M. Mays, J.L. Morton, D.H. Saville, G. Williams, P.J. Wise (Council).

The registered address of the charity is that of the Treasurer, T.G. Webb Ware, 35 Coniston Court, Kendal Street, London, W2 2AN. The Society's activities are governed by its rules, reprinted by order of Council, 1995.

The Society's bankers are National Westminster Bank, PO Box 10720, 217 Strand, London, WC2R 1AL.

The Independent Examiner is R.A. Merson, F.C.A., Tanyard House, 13A Bridge Square, Farnham, Surrey, GU9 7QR.

The Society holds meetings on the fourth Tuesday of each month, from January to June and September to November at the Warburg Institute, University of London at which a substantive paper is read. On 26th October Professor Glyn Davies delivered the biannual Linecar Lecture, *The single currency in historical perspective*. On 3rd July a special one-day meeting on *West Country Numismatics* was held at The Municipal Hall, Taunton, Somerset.

In January, 1999 the Society published Volume 67 of the British Numismatic Journal. This is a hardbound volume of 185 pages and 32 plates containing six principal articles and twenty six short articles and reviews. It also includes the Coin Register 1997 listing in detail 255 single coin finds in Britain and Ireland, the Presidential Address 1997, Proceedings 1997 and accounts for the year ended 31st October 1996.

The second volume in the Special Publications series, *The Soho Mint and the Industrialization of Money* by Richard Doty, was published in November 1998.

The Society also distributed to members three editions of the CCNB (Coordinating Committee for Numismatics in Britain) Newsletter containing short and topical articles, reviews and details of meetings and exhibitions.

The Society awards two prizes. The Sanford Saltus gold medal is awarded every third year for papers appearing in the British Numismatic Journal. The Council Prize is also awarded every three years for the encouragement of research and publication by younger numismatists. The Council Prize for 1999 was awarded to Dr Philip de Jersey.

The Society holds a substantial library, jointly with the Royal Numismatic Society, at the Warburg Institute. Books are available for loan to members, both in person and by post. The Society maintains a programme of acquiring new books and rebinding existing copies where necessary.

The Society pays annual subscriptions to the International Numismatic Commission and to the British Association of Numismatic Societies (BANS).

The Society is financed by an annual subscription of £24 paid by both private and institutional members, together with interest on cash held on deposit and donations from members over and above their subscription. It also holds a stock of backnumbers of the British Numismatic Journal which are available for purchase by members or non-members.

All the officers of the Society offer their services on a voluntary basis and administrative costs are kept to a minimum, consisting largely of postage and stationery.

The Society is actively seeking to increase its membership, both in Britain and overseas. Over the last ten years membership has steadily risen from 500 to just under 600.

THE BRITISH NUMISMATIC SOCIETY STATEMENT OF FINANCIAL ACTIVITIES FOR THE YEAR ENDED 31 OCTOBER 1999

	<i>General Fund £</i>	<i>Designated Funds £</i>	<i>Total 1999 £</i>	<i>Total 1998 £</i>
INCOME AND EXPENDITURE				
INCOME RESOURCES				
Subscriptions and Entrance Fees received for 1999 and earlier years	12,780	–	12,780	12,625
Interest received	2,700	4,637	7,337	9,642
Donations	63	–	63	32
Sale of BNS Medal	130	–	130	–
Sale of Publications :				
Backnumbers	315	–	315	128
Special Publications	–	1,344	1,344	–
BNJ Index	862	–	862	847
TOTAL INCOME RESOURCES	<u>16,850</u>	<u>5,981</u>	<u>22,831</u>	<u>23,274</u>
RESOURCES EXPENDED				
British Numismatic Journal	13,888	–	13,888	14,404
Special Publications	–	4,000	4,000	–
CCNB Newsletter	520	–	520	–
BNJ Index	624	–	624	600
Sanford Saltus Medal	200	–	200	200
BNS Medal	70	–	70	35
Provincial Meetings	–	61	61	129
Linecar Lecture	–	644	644	350
London Meetings	380	–	380	380
Council Prize	150	–	150	
Library	813	–	813	744
Subscriptions	115	–	115	100
Bank Charges	30	–	30	–
Other printing, postage and stationery	753	–	753	262
TOTAL RESOURCES EXPENDED	<u>17,543</u>	<u>4,705</u>	<u>22,248</u>	<u>17,724</u>
NET INCOMING RESOURCES, BEING NET MOVEMENT IN FUNDS	(693)	1,276	583	5,550
FUND BALANCES (B/F) 1.11.98	<u>32,222</u>	<u>94,936</u>	<u>127,158</u>	<u>121,608</u>
FUND BALANCES (C/F) 31.10.99	<u>31,529</u>	<u>96,212</u>	<u>127,741</u>	<u>127,158</u>

THE BRITISH NUMISMATIC SOCIETY

BALANCE SHEET AS AT 31 OCTOBER 1999

	<i>1999</i> £	<i>1998</i> £
GENERAL FUND	31,529	32,222
DESIGNATED FUNDS	96,212	94,936
	<hr/> 127,741	<hr/> 127,158
ASSETS:		
Library and Furniture at cost less amounts written off	160	160
Stock of Medals	326	370
Stock of BNJ Index	–	545
Sundry Debtors	1,566	1,004
Cash at Bankers and in Hand		
Bank – Deposit Account	154,000	152,000
Current Account	2,098	1,849
	<hr/> 158,150	<hr/> 155,928
LIABILITIES:		
J. Sanford Saltus Medal Fund	600	400
Subscriptions received in advance	240	507
Sundry Creditors and Outstanding Charges	971	1,014
Creditors and Provision for Journals	28,598	26,849
	<hr/> 30,409	<hr/> 28,770
	<hr/> 127,741	<hr/> 127,158

Registered Charity No. 275906

The accounts were approved by Council on 26 September 2000

THE BRITISH NUMISMATIC SOCIETY NOTES TO THE ACCOUNTS FOR THE YEAR ENDED 31 OCTOBER 1999

1. Accounting Policies

General

These accounts have been prepared under the historic cost convention and in accordance with applicable accounting standards and the statement of Recommended Practice on Accounting by Charities.

Subscriptions

No credit is taken for subscriptions in arrears

2. Funds

Individual fund movements

	<i>Linecar Fund £</i>	<i>Osborne Fund £</i>	<i>Benefactors' Fund £</i>	<i>Total £</i>
Balance at 1.11.98	£9,998	76,257	8,681	94,936
<i>Income</i>				
Interest received	488	3,725	424	4,637
Sale Special Publications	—	1,344	—	1,344
<i>Expenditure</i>				
Special Publications	—	(4,000)	—	(4,000)
Taunton Meeting	—	—	(61)	(61)
Linecar Lecture	(644)	—	—	(644)
Balance at 31.10.99	9,842	77,326	9,044	96,212

The General and Designated Funds are all unrestricted.

The Linecar Fund was started in 1986 with the bequest of £5,000 and Council has designated this Fund to provide an endowment for a biennial lecture in Mr Linecar's memory.

The Osborne Fund was started in 1991 with the bequest of £50,000 and Council has designated this Fund to finance the series of Special Publications.

The Benefactors' Fund consists of other bequests to the Society.

3. Creditors and provision for Journals

	£
British Numismatic Journal 68 (1998), published January 2000	13,498
British Numismatic Journal 69 (1999), to be published December 2000	15,100
	<u>28,598</u>

INDEPENDENT EXAMINER'S REPORT TO THE MEMBERS OF THE BRITISH NUMISMATIC SOCIETY

I report on the accounts of the Society for the year ended 31st October 1999, which are set out on pages 2 to 4.

Respective responsibilities of trustees and examiner

Council as the Society's trustees are responsible for the preparation of the accounts; and consider that the audit requirement of Section 43(2) of the Charities Act 1993 does not apply. It is my responsibility to state, on the basis of procedures specified in the General Directions given by the Charity Commissioners under Section 43(7) (b) of that Act, whether particular matters have come to my attention.

Basis of independent examiner's report

My examination was carried out in accordance with the General Directions given by the Charity Commissioners. An examination includes a review of the accounting records kept by the Society and a comparison of the accounts presented with those records. It also includes consideration of any unusual items or disclosures in the accounts, and seeking explanations from Council concerning any such matters. The procedures undertaken do not provide all the evidence that would be required in an audit, and consequently I do not express an audit opinion on the view given by the accounts.

Independent examiner's statement

In connection with my examination, no matter has come to my attention:

(a) which gives me reasonable cause to believe that in any material respect the requirements to keep accounting records in accordance with section 41 of the Charities Act 1993; and to prepare accounts which accord with the accounting records and to comply with the accounting requirements of that Act have not been met; or

(b) to which, in my opinion, attention should be drawn in order to enable a proper understanding of the accounts to be reached.

R.A. Merson, F.C.A.
Tanyard House,
13A Bridge Square,
Farnham,
Surrey,
GU9 7QR.

26 September 2000

MEMBERS OF THE BRITISH NUMISMATIC SOCIETY

31 DECEMBER 2000

Note All members live in the United Kingdom except where indicated. Honorary members are denoted by an asterisk.

ORDINARY MEMBERS

- | | | | |
|-------|--------------------------------|-------|------------------------------------|
| 1995 | Abramson, A.I.J. | 1990 | Blunt, R.C.A. |
| 1995 | Adams, C. | 1994 | Bole, S.A. |
| 1975 | Adamson, A.S. | 1983 | Bonser, M.J. |
| 1962 | Allen, J.C. | 1987 | Bor, E. |
| 1973 | Allen, J.N. | 1997 | Bornholdt, Kristin A. |
| 1977 | Allen, Dr M. R. | 1994 | Bridgewater, M.A. |
| 1975 | Alliss, G.P. | 1980 | Bromley, Dr R.G. (Denmark) |
| 1997 | Al-Qazweni, H. (Kuwait) | 1999 | Broomfield, P.M. |
| 1988 | Anderson, I.B. | 1988 | Brown, D.K. |
| 1956 | Anderson, M.J. | 1954 | Brown, Prof. I.D. (Canada) |
| 1995 | Anderson, W.L. (USA) | 1980 | Brown, J.D. |
| 1968 | Andrew, J.P. | 1946 | Brown, L.A., L VO |
| 1990 | Anstiss, T.G. | 1967 | Buck, I.R. |
| 1995 | Anze, Dr O. (Brazil) | 1985 | Bull, M. |
| 2000 | Archer, E.P. | 1999 | Bulteau-Canteloup, F.V.G. (France) |
| 1962 | Archibald, Marion M. | 1986 | Burnett, Dr A.M. |
| 1998 | Arthur, B. | 1975 | Burrows, O.M. |
| 1991 | Ashman, K.G. | 1965 | Byde, A.G. |
| 1997 | Atchison, D.A. (Eire) | 1995 | Byrne, Dr A.J. |
| 1971 | Atkinson, Eileen M. | 1966 | Campbell, Dr A.J.P. |
| 1990 | Attwood, P. | 1994 | Cary, T.J. |
| 1995 | Aves, N.J. | *1979 | Carson, Dr R.A.G. (Australia) |
| 1995 | Bagwell Purefoy, P.R. | 1980 | Casey, P.J. |
| 1987 | Bailey, D.T. | 2000 | Cates, G.W. (Australia) |
| 1999 | Baker, Prof. D.C. (USA) | 1972 | Challis, Dr C.E. |
| 1978 | Baker, R. | 1991 | Chandler, T.S. |
| 1968 | Baldwin, A.H.E. | 1976 | Chapman, D.A. |
| 1996 | Ball, J.D. (Canada) | 1994 | Charman, G.W. |
| 1972 | Bamforth, J.H., OBE (Guernsey) | 1969 | Chater, A.O. |
| 1995 | Barber, P.M. | 1997 | Cheek, J. |
| 1987 | Barclay, C.P. | 1997 | Cheesman, Dr C.E.A. |
| 1991 | Barr, D.A. | 1965 | Chick, D.S. |
| 1996 | Barras, Dr R. | 1971 | Chown, J.F. |
| 1986 | Barrett, W.L.S. (Canada) | 1993 | Churchill, R.C. |
| 1987 | Bateson, Dr J.D. | 1993 | Clancy, Dr K. |
| 1998 | Bedel, J.-C. (France) | 1968 | Clarke, M.P. |
| 1988 | Bell, G.W. | 1977 | Clarke, W.N. (Canada) |
| 1972 | Bennett, C.H. | 1990 | Cobb, D.J. |
| 1996 | Bennett, G.J. | 1982 | Cobcroft, Dr M.D. (Australia) |
| 1999 | Bentall, D.E. | 2000 | Cohen, A. |
| *1953 | Berghaus, Prof. P. (Germany) | 2000 | Colliass, R. |
| 1987 | Bernard, K.J. (U.S.A) | 1996 | Collings, Dr F.W. |
| 1984 | Besly, E.M. | 1976 | Comber, C.H. |
| 1995 | Bhaseen, F. | 1993 | Comet, Dr P.A. (USA) |
| 1978 | Biddle, Prof. M. | 1982 | Conte, Dr W.J. (USA) |
| 1986 | Biggs, Prof. N.L. | 1985 | Cook, Dr B.J. |
| 1996 | Bishop, R. | 1995 | Cook, R. |
| 1976 | Bispham, J. | 1990 | Costilhes, A.J. (Brazil) |
| 1971 | Blackburn, Dr M.A.S. | 1993 | Cottam, G.L. |
| 1987 | Blakey, R.G. (Canada) | 1986 | Courtney, Dr Yolanda C. |
| 1987 | Bland, Dr R.F. | 2000 | Cox, A.G. |
| 1974 | Blowers, I.H. | 1998 | Coyte, P.D.C. |
| | | 1990 | Crabtree, P. |

- 1995 Crafter, T.C.R.
 1998 Cribb, J.E.
 1999 Critchley, S.R.
 1990 Cross, J.N.
 1989 Cuddeford, M.J.
 1991 Curteis, M.
 1967 Curtis, B.T.
 1957 Danson, E.W.
 1997 Davenport, M.C.
 1995 Davies, Dr J.A.
 1977 Davis, A.J.
 1985 Davis, Dr D.C. (USA)
 1970 Davis, R.L.
 1994 Davison, I.D.
 1982 Davisson, Dr A. (USA)
 1973 Dawson, B.J.
 1996 Dawson, Dr J.B.
 1986 Dawson, M.
 1969 De Clermont, A.P.
 1995 De Graaf, Dr C. (Netherlands)
 2000 De Jersey, Dr P.
 1984 Dekesel, Drs C.E. (Belgium)
 1974 Dekin-Parry, J.
 1998 De Montfalcon, J.Y.
 1977 De Wit, Prof. G.W. (Netherlands)
 1977 Dickinson, M.J.
 1996 Dobson, Dr L.P.
 1983 Doty, Dr R.G. (USA)
 1962 Dowle, A.W.
 1994 Duerr, W. (Germany)
 1990 Dunlop, G.
 1962 Dupree, T.W.J.D.
 1963 Dyer, G.P.
 1954 Dykes, Dr D.W.
 1978 Eaglen, Dr R.J.
 1999 Earland-Bennett, P.M.
 2000 Eckardt, K. V.
 1968 Edmondson, R. W.
 1981 Eimer, A.C.
 1970 Enright, J.A.
 1946 Erskine, The Hon. R.W.H.
 1997 Everson, T.F.J.
 1984 Ewing, M.I.H.
 1968 Falkiner, R.G.
 1970 Farey, R.A.
 1986 Farthing, Lt Cdr, C.R.S.
 1961 Fearon, D.
 1968 Fenton, S.C.
 1972 Ferguson, W.B.
 1965 Fitts, A.M., III (USA)
 1997 Fledderman, R.G. (Jr) (USA)
 2000 Ford, S. (USA)
 1994 Franco, D.E. (USA)
 1979 Freedman, D.S.
 1998 Freehill, M.E. (Australia)
 1998 Freeman, S.
 1972 Freeman, Dr W.A.D.
 1975 Fynes, Dr R.C.C.
 1968 Gallagher, C. (Eire)
 1999 Gargett, P.
 1969 Gaspar, Prof. P.P. (USA)
 1970 Gaunt, D.J.
 1992 Georgopoulos, G.E.
 1984 Gilbert, A.J.
 1976 Gittoes, G.P.
 1986 Glanfield, P.C.
 1983 Glews, P.
 1962 Goddard, J.L.
 1984 Gomm, J.D.
 1964 Goodling, E.C. (USA)
 1992 Graham, P.L.
 1995 Grayburn, R.E.H.
 1980 Greenall, Stella M.
 1995 Greenaway, B.M.
 1978 Greenaway, Sir J.M.B., Bt
 1975 Greenhalgh, D.I.
 *1947 Grierson, Prof. P.
 1999 Griffin, R.F.
 1979 Griffiths, D.B.
 2000 Hall, J.A.
 1998 Hallam, M.J.
 1990 Halliday, A.J.
 1992 Halse, A.M.
 1967 Harl, S.W. (USA)
 1984 Harpin, D.W.
 1994 Harris, D.H.
 1961 Harris, Dr E.J.
 1984 Harvey, Yvonne
 1998 Hatch, R.
 1978 Hawkins, A.P.
 1998 Hedley, G.
 1955 Hewitt, Rev. K.V.
 1997 Hewitt, Virginia
 1998 Higginson, P.P.
 1969 Hill, Dr D.H.
 2000 Hill, P.M.
 1995 Hill, S.
 1982 Hillier, M.J.
 2000 Hodge, E.C.
 1976 Hodgson, T.H.
 1994 Holland, Dr P.M. (USA)
 1991 Holman, D.J.
 1980 Holmes, A.J.
 1987 Holmes, N.M.McQ.
 1964 Hooke, J.H.T.
 1996 Hulett, Dr J.R.
 1989 Hunt, P.
 1963 Hyde, Dr R.J.
 1969 Ilsley, R.C.
 1996 Inder, R.A.
 1991 Jeanrie, C.C. (Canada)
 1999 Jeffery, E.J.
 1990 Jenkins, I.C.
 1984 Jensen, Dr J.S. (Denmark)
 2000 Jewell, J. (USA)
 1999 Jobling, M.
 1990 Johnson, D.R.
 1997 Johnson, G. (USA)
 1999 Johnstone, P. (USA)
 1990 Johnstone, Yvonne
 1990 Jones, Dr A.V.
 1990 Jones, Dr I.N.
 1983 Jones, M.E.P.
 1976 Julian, R.W. (USA)
 1994 Jull, I.
 1996 Karon, P. (Puerto Rico)
 1961 Kay, Dr J.A. (New Zealand)
 1997 Keith, A.J. (Canada)

- 1988 Kelly, M.T.
 1999 Kenney, J.E.
 1974 Keynes, Prof. S.D.
 1992 Kightley, D.B.
 1975 King, J.D. (USA)
 1993 King, M.D.
 1938 King, P.I.
 2000 Kirton, R. (Germany)
 1972 Knowles, Dr J.O.
 1984 Kricheldorf, H. (Germany)
 1971 Laing, Isobel McD
 1998 Lamont, E.J.
 1969 Leach, P.E.
 1982 Lean, W.M.
 1982 Lee, D.
 1981 Leighton, J.
 1964 Lessen, M. (U.S.A)
 2000 Levine, Dr E.L.
 1998 Lewis, Mr. P.M.
 1980 Linzalone, J.P. (USA)
 1954 Lister, Major C.W.
 1993 Lloyd, Dr C.D.
 1996 Lockren, R.G.
 1992 London, J.B.
 1999 Longfellow, J.A.
 1980 Lorich, B.R. (USA)
 1998 Loulukakis, D.G.
 1990 Lubbock, J.O.
 1973 Lubbock, R.M.
 *1945 Lyon, C.S.S.
 1969 Mackay, A.B.
 1999 Mackay, W.A.
 1994 MacKechnie-Jarvis, C.
 1984 Macmillan, A. T.
 1976 Macpherson, R.A.
 1988 Maddicott, Dr J.R.L.
 1982 Mader, B.M. (Germany)
 1996 Mäkeler, H. (Germany)
 1962 Malcolm, Dr J.C.St.A.
 1963 Manville, H.E. (USA)
 1986 Margolis, R. (USA)
 1972 Martin, C.J.
 1995 Martin, Dr D.M.
 1984 Mass, Prof. J.P. (USA)
 1982 Mattinson, J. B.
 1994 May, Dr J.
 1996 Mayell, B.J.
 1973 Mayhew, Dr N.J.
 1971 Mays, J.O'D.
 1984 Mays, Dr Melinda R.
 1985 McCammon, A.L.T. (Switzerland)
 2000 McCormick, J.N.
 1992 McFadden, E.J.
 1996 Meadows, Janet E.
 2000 Mernick, H.M.
 1970 Mernick, P.H.
 1970 Merson, R.A.
 1966 Metcalf, Prof. D.M.
 1984 Miller, Dr D.
 1998 Miller, Dr S.M.
 1977 Millett, T.C.
 1978 Milward, F.J.W.
 1980 Minnitt, S.C.
 1954 Mitchell, P.D.
 1973 Mitchell, S.G.
 1986 Mitchiner, Dr M.B.
 1989 Moesgaard, J.C. (Denmark)
 1996 Molyneux, N.A.D.
 1972 Moore, T.A.
 1986 Moorhead, T.S.N.
 1985 Morehart, Prof. Mary J. (Canada)
 1994 Morris, A.
 1963 Morrison, A.W.
 1995 Morse, R.P.
 1987 Morton, J.L.
 1959 Mulholland, J.H. (Eire)
 1995 Mullaly, T.F.S.
 1995 Mussell, J.W.
 2000 Myers, W.
 1965 Mygind, H.H.S.
 1992 Neupert, P.E. (USA)
 1998 Nicholl, A.P.A.
 1992 Nicholson, Dr B.
 1995 Nielsen, H.O.
 1999 Nixon, E.R.
 1992 Noakes, D.W.
 1972 Noble, W.J. (Australia:)
 1981 Norfolk, Elizabeth K.
 1995 Norman, T.G.
 *1957 North, J.J.
 1993 O'Bee, M.B. (Cyprus)
 1995 Oddie, Dr G.M.
 1966 O'Hara, M.D.
 1980 Otani, Y. (Japan)
 1998 Owen, A.
 1996 Owens, R.L. (USA)
 1963 Pagan, H.E.
 1984 Palmer, D.J.
 1997 Palmer, D.R.
 1996 Palmer, I.M.D.
 1983 Palmer, T.M.
 1996 Parker, G.S.
 2000 Parker, I.
 1988 Patterson, Major E.J.
 1998 Peakall, G.A.
 2000 Pennock, D.C.
 1998 Perry, J.T. (Jr) (USA)
 1997 Peters, K.W.
 1986 Petersson, Dr H.B.A. (Sweden)
 1998 Phillips, P.E.
 1999 Phillips, T.G. (Gibraltar)
 1960 Pirie, Elizabeth J.E.
 1968 Pitchfork, Dr C.E. (Australia)
 1986 Pollock, A.W., III (USA)
 1955 Porteous, J. OBE
 1997 Postlethwaite, I.
 1992 Powell, M.W. (Luxembourg)
 1970 Preston-Morley, P.J.
 1963 Pybus, B.
 2000 Rabin, P (Switzerland)
 1990 Rainey, E.D.
 1982 Rainey, J.F.
 1976 Rasmussen, M.C.S.
 1977 Reeds, B.
 1971 Remick, J.H. (Canada)
 1998 Rennie, A.C.L., JP

1961	Rhodes, N.G.	1986	Stewart, C.
1981	Rice, Father J.G. (Eire)	1952	Stewartby, Rt. Hon. Lord B.H.I.H.
1990	Riley, C.M.W.	1989	Strange, R.J.
1988	Roberts-Lewis, J.E.	1982	Strawbridge, J.J.
1970	Robertson, T.J.	1999	Stuart, D.
1993	Robinson, Dr B.	1993	Stueve, Col C.R. (USA)
1993	Robinson, Prof J.D. (Jr) (USA)	1990	Symons, D.J.
1971	Robinson, Dr P.H.	1997	Syson, G.L.
1999	Robinson, R.J.	2000	Talbot, J.A.
1990	Rubino, A.V.	1973	Taylor, Dr I.H.
1991	Rudd, C.G.	1991	Taylor, S.D.
1974	Rudling, D.R.	1984	Teller, M.L. (USA)
1979	Russell, P.	1985	ter Harr, R.E.L., QC
1996	Salter, Vanessa K.	1983	Thomas, R.I.
1969	Sancroft-Baker, R.	1975	Thompson, P.R.
1986	Sanders, Revd R.M.	1964	Thompson, R.H.
1979	Saville, D.H.	1963	Thomson, I.C.
1980	Scaife, J.D.	1998	Tisbury, D.J.
1988	Scheers, Prof. S.A.M. (Belgium)	1986	Tomlinson Fort, E. (USA)
1978	Schneider, Dr I. (USA)	1998	Tooley, N.
1982	Schwer, P.A.S.	1990	Treleaven, P.J.
1996	Scott, D.	1996	Turner, G.R.
1962	Scott, J.G.	1979	VanArsdell, R.D. (USA)
2000	Sealey, Dr P.R.	*1958	Van der Meer, Drs. G. (Netherlands)
1953	Sealy, D.L.F.	1994	Varnham, R.P.
1965	Seaman, R.J.	1971	Vecchi, I.
1984	Sellwood, D.G.	1983	Vice, D.L.
1994	Senior, M.P.	1985	Vogelaar, Dr J.S. (Eire)
1959	Sharp, M.B.	1993	Von Geldern, E. (USA)
1969	Shaw, D.G.	1996	Vosper, M.R.
1990	Shea, K.W. (Australia)	1983	Waddell, P.D.S.
1998	Shott, M.	1999	Wade, M.J. (Australia)
1999	Sills, J.	1997	Waldron, M.J. (Hong Kong)
1996	Simmons, Frances	1974	Walker, D.A.
1990	Simpson, J.N.	1971	Walport, Prof. M.J.
1994	Sinclair, May	1994	Watts, N.A.
2000	Singer, Dr G.A. (USA)	1996	Wear, Sara L.
1967	Sirr, C.C. (USA)	1989	Webb, C.A.
1998	Skellern, S.L.	1974	Webb Ware, T.G.
1997	Skingley, P.	1950	Weibel, J.
1974	Sly, J.S.	1987	Weijer, Drs N.F. (Netherlands)
1959	Smart, Dr Veronica J.	1966	Wertheim, J.D.
1998	Smith, C.	1972	West, V.D.
1990	Smith, P.	1989	Wetton, N.L.
1999	Smith, P.N.	1982	Wherrett, T.S.
1994	Smith, P.L.	1972	White, D.P.
1998	Smith, R.	2000	Wilkes, T.
1998	Snelling, G.F.	1998	Wilkinson, Dr D.R.
1998	Snowball, B.C.	1990	Williams, A.A. (Australia)
1978	Sommerville, G.G.	1970	Williams, D.M.
1982	Sorenson, Dr D.W. (USA)	1997	Williams, Dr G.
1987	Spring, Dr J.	1990	Williams, H.P.G.
1952	Spufford, Prof. P.	1997	Williams, Dr J.H.C.
1996	Stafford-Langan, J. (Eire)	1995	Wilson, A.
2000	Steuart-Fotheringham, H., OBE	1996	Wilson, A.G.
1975	Stevens, Dr P.J.E.	1998	Wilson, D.J.
1997	Stevens-Cox, Dr G. (Guernsey)	1992	Winters, I.G. (Dubai)

1995	Wise, P.J.	Leeds, University Library
1977	Withers, P.	Leicester, Libraries & Information Service
1972	Wood, C.J.	Leicester, Newarke House Museum
2000	Wood, Dr D.A.	Leiden, Koninklijk Penningkabinet (Netherlands)
*1952	Woodhead, P.	Lewes, Sussex Archaeological Society
1971	Woolf, L.N.	Llantrisant, Royal Mint
1989	Wren, C.R.	Lodz, Muzeum Archeologiczne I Etnograficzne (Poland)
1995	Wyer, J.W.	London, Bank of England Museum
1973	Young, D.M.	London, British Museum
1994	Young, J.H.	London, Glendining & Co
		London, Guildhall Library
		London, Library (St James's Square)
		London, Royal Numismatic Society
		London, Society of Antiquaries
		London, University of London Library
		Los Angeles, University of California Library (USA)
		Louvain, Université Catholique Library (Belgium)
		Manchester, City Museum
		Manchester, University Library
		Marseille, Cabinet des Monnaies et Médailles (France)
		Melbourne, State Library of Victoria (Australia)
		Michigan, University Library (USA)
		Munich, Bayerische Staatsbibliothek (Germany)
		Munich, Staatliche Münzsammlung (Germany)
		New Orleans, Tulane University Library (USA)
		New York, American Numismatic Society (USA)
		New York, Metropolitan Museum of Art (USA)
		Norwich, Castle Museum
		Nottingham, University Library
		Oslo, Universitetets Myntkabinett (Norway)
		Ottawa, Bank of Canada, National Currency Collection (Canada)

JUNIOR MEMBER

2000 Morgan, D.H.

INSTITUTIONAL MEMBERS AND EXCHANGES

Aberdeen, Art Gallery & Museum		
Adelaide, State Library of South Australia	(Australia)	
Athens, Numismatic Museum	(Greece)	
Barcelona, University Library	(Spain)	
Bedford, Museum		
Belfast, Ulster Museum		
Berkeley, University of California Library	(USA)	
Berlin, Münzkabinett der Staatlichen Museen	(Germany)	
Birmingham, City Museum & Art Gallery		
Birmingham, University Library		
Bloomington, Indiana University Library	(USA)	
Boston Spa, British Library		
Bristol, City Museum		
Brussels, Cabinet des Médailles, Bibliothèque Royale	(Belgium)	
Bury St. Edmunds, Suffolk Archaeological Services		
Cambridge, Fitzwilliam Museum		
Cardiff, National Museum of Wales		
Catonsville, A.O. Kuhn Library, Baltimore	(USA)	
Chapel Hill, University of North Carolina Library	(USA)	
Charlottesville, University of Virginia Library	(USA)	
Chester, Grosvenor Museum		
Chicago, University Library	(USA)	
Colchester, County Museum		
Colorado Springs, American Numismatic Association	(USA)	
Columbia, University of Missouri Library	(USA)	
Columbus, Ohio State University Library	(USA)	
Copenhagen, Nationalmuseet	(Denmark)	
Dublin, National Library of Ireland	(Eire)	
Dublin, National Museum of Ireland	(Eire)	
Dublin, Numismatic Society of Ireland	(Eire)	
Durham, University Library		
Edinburgh, Central Library		
Edinburgh, National Museum of Scotland		
Edinburgh, University Library		
Exeter, University Library		
Frankfurt am Main, c/o Dr Busso Peus Nachf	(Germany)	
Glasgow, Hunterian Museum		
Glasgow, Mitchell Library		
Glasgow, University Library		
Hanover, Münzkabinett, Deutsche Bank	(Germany)	
Harvard, University Library	(USA)	
Helsinki, National Board of Antiquities Library	(Finland)	
Hereford, City Library		
Inverness, Museum & Art Gallery		
Ipswich, Numismatic Society		
Ithaca, Cornell University Library	(USA)	
Lawrence, University of Kansas Library	(USA)	
		Oxford, Ashmolean Museum
		Paris, Cabinet des Médailles, Bibliothèque Nationale (France)
		Reading, Coin Club
		Reading, University Library
		Rome, Istituto Italiano di Numismatica (Italy)
		St. Louis, Washington University Library (USA)
		St. Petersburg, State Hermitage Museum (Russia)
		Sheffield, University Library
		Southampton, University Library
		Spalding, Gentlemen's Society
		Stanford, University Library (USA)
		Stockholm, Kungelige Myntkabinettet (Sweden)
		Stockholm, Numismatiska Institutionen (Sweden)
		Stuttgart, Württembergisches Landesmuseum (Germany)
		Sydney, State Library of New South Wales (Australia)
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		Warsaw, Instytut Archeologii I Etnologii (Poland)
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		York, Yorkshire Museum
		Yorkshire Numismatic Society
		Zurich, Schweizerisches Landesmuseum (Switzerland)

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PETER PRESTON-MORLEY

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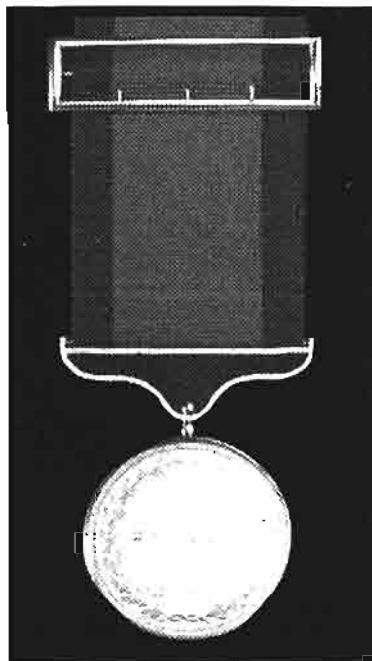
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